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LAKE CARRIERS' ASSOCIATION.

To consider and take action upon all general questions relating to the navigation and carrying business of the Great Lakes, maintain necessary shipping offices and in general to protect the common interests of Lake Carriers, and improve the character of the service rendered to the public.

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THE SHIPPING BILL ENDORSED BY PRACTICAL SEAMEN.—A PERTINENT AND WELL-ADVISED RESOLUTION.

Copy of resolution adopted by the American Association of Masters and Pilots, at their annual meeting in Washington, D. C., on January 24, 1900, and presented to the House Committee on Merchant Marine and Fisheries and the Senate Committee on Commerce, on January 25, 1900, by Past Grand Captain W. S. Van Keuren, of New York, and Capt. Gray, of Portland, Ore., a committee appointed by the Association.

Whereas, In the carriage of American imports and exports several thousand ocean-going ships are annually employed, but nine per cent. of which vessels are built in the United States and owned by American citizens; and

Whereas, The monopoly of our foreign carrying trade now enjoyed by alien ships, to which our people annually pay $200,000,000 in freight charges for ocean transportation, deprives thousands of American shipmasters, and many additional thousands of American officers and seamen, of employment; and

Whereas, The lack of an American merchant marine in the foreign carrying trade carries with it a lack of American officers and seamen, thus perpetuating our national weakness upon the seas, while our commerce, in affording employment to foreign ships, foreign officers and seamen, increases the naval, maritime and commercial strength of our foreign rivals; and

Whereas, A bill is now pending in each branch of Congress, introduced in the Senate by Senator Frye, and in the House by Representative Payne, providing for the upbuilding of the American merchant marine in the foreign carrying trade; therefore, be it

Resolved, That the American Association of Masters and Pilots of Steam Vessels, in annual convention assembled, earnestly urges upon Congress the immediate passage of the said pending shipping bill, to the end that American shipmasters, American officers and American seamen may secure additional opportunities for employment upon the sea, so that the $200,000,000 now paid annually to foreign ships may be paid to American ships and thus kept at home, and in order that the United States may obtain the prestige and protection that inheres in the possessisn of an American-built, American-owned, and American-manned merchant marine adequate to all the needs of American foreign commerce.

REAR ADMIRAL HICHBORN AGAINST COALING STATIONS.

Rear Admiral Philip Hichborn, U. S. N., Chief Constructor of the Navy, will declare himself officially against the proposed coaling station system of the government. This expression of opinion will probably be given to the House Naval Committee when the chief constructor appears before that committee. He believes that specially designed colliers should be built with a view to coaling at sea and he will suggest the innovation that instead of a naval ship towing the collier, while the former is being coaled under way, the collier tow the naval vessel, comsuming its own store of fuel and preserving that of the warship. This appears to be an advantage over the system which was recently tested. Rear Admiral Hichborn believes that the coaling station idea is sufficiently meritorious in time of peace but in time of war it furnishes, he thinks, an additional point of attack by an enemy against whom remote stations must be guarded. The matter of transporting fuel to these stations, he maintains, adds to the cost of the naval establishment without any adequate returns. Coal can be had in almost any quarter of the globe in time of peace and in time of war he believes that the only system for re-coaling ships will be that by means of colliers. The latter can be so constructed as to tow instead of being towed, and, being equipped with towing machines, they can handle large ships without danger of hawsers parting and other accidents.

RIVER AND HARBOR WORK.

That there will be no river and harbor appropriation this session of Congress, is now a foregone conclusion, at the same time the River and Harbor Committee are giving hearings to the delegation appearing before them in the interest of waterway improvements.

Last week the committee gave a hearing to a delegation interested in the Tennessee river and its tributaries, also to persons from Sabine Lake, Texas; Feb. 16 lake interests and the Sault Ste. Marie Power Co., concerning the proposed power canal at the "Soo" will be heard. The hearings are not indicative that a bill will be framed at this session, as the committee has left that question open, but they will be serviceable when it is decided to frame a bill. In the meantime Mr. Burton, chairman of the committee, has been given authority to have printed and bound, such papers and documents for the use of said committee as it may deem necessary in connection with the subjects considered or to be considered by said committee during the Fifty-sixth Congress, also that the Committee on Rivers and Harbors sit during the sessions of the House and during the recess of Congress.

Evidently Mr. Burton is working along the lines, if not positively accordingly to the dictates of the administration. The forehandness in printing the list of money at disposal on Dec. 31 for all pending river and harbor projects, which makes a most appalling column, is attributed to his keen appreciation of the situation, and in a measure to head off those who were and are crowding so hard for fresh appropriations that they would hardly be denied.

There is a vast amount of money already appropriated under the continuous contract system, which has not been expended, the sums ready for use in the rivers and on Lakes Erie and Ontario, indicate the amount of authorized work that has not yet been carried out.

For improvement on St. Mary's river there was $368,672.27 unexpended Dec. 31. For improvements in Hay Lake channel, St. Mary's river, there was $100,000 available at the end of last year, and for the harbor of refuge at Sand Beach there was $147,684.15.

Detroit river, Michigan, $100,000; Rouge river, Michigan, $13,619; Monroe harbor, Michigan, $4,910; Toledo harbor $129,069, Port Clinton harbor $6,346, Sandusky harbor $57,834, Huron harbor $25,000, Lorain harbor $45,963, Cleveland harbor, $391,623, Fairport harbor $120,535, Ashtabula harbor $43,712, Conneaut harbor $95,202, harbor at Erie, Pa., $78,459; harbor at Dunkirk, N. Y., $1,741; harbor at Buffalo, N. Y., $798,204; Buffalo entrance to Erie basin and Black Rock harbor, $21,075; Tonawanda harbor and Niagara river, N. Y., $22,415; Niagara river from Tonawanda to Port Day, N. Y., $1,790; harbor at Wilson, N. Y., $2,233; harbor at Charlotte, N. Y., $1,843; harbor at Pultneyville, N. Y., $975; harbor at Great Sodus Bay, N. Y., $7,071; harbor at Little Sodus Bay, N. Y., $2,987; harbor at Oswego, N. Y., $34,557; harbor at Cape Vincent, N. Y., $49,577; shoals in St. Lawrence river between Ogdensburg and foot of Lake Ontario, $6,279; harbor at Ogdensburg, N. Y., $14,913.

The engineer department made no total footings on the amount of money now available, but the aggregate is well away into the millions, and bears out Mr. Burton's statement made some time ago regarding the improbability of any sufficient demand for a river and harbor bill to be framed for passage at this session. The engineering department is already far behind in its work, and Mr. Burton believes that so much money already appropriated is unexpended that perhaps it would be the part of wisdom to postpone the framing of a bill until the next session of Congress.

ANOTHER CANADIAN ROUTE TO THE COAST.

Hon. J. I. Tarte, the Dominion Minister of Public Works, has favorably considered the proposition of deepening the French river to such a depth as to permit the large lake steamers to carry their cargoes of the products of the great north-west to wharves at North Bay. To undertake this work the Minister has decided to ask his colleagues to permit him to place in the estimates a large amount of money. The river will have to be improved from its mouth at the Georgian Bay to Lake Nipissing, a distance of fifty miles. It is already a navigable river and only on portions of it will it be necessary to expend large sums to make it a first-class waterway for vessels drawing 18 feet. Outside of the building of three dams necessary the work would consist of dredging. Mr. Tarte says :

"Just look at the facts. Up to this day, the Canadian Pacific railway has carried our Canadian wheat to Fort William, where it has been left to its fate, or, in other words, has been taken by American barges to Buffalo. Out of ten bushels of Canadian grain, I do not think I am exaggerating in saying nine have gone to American ports. All that will be changed by the project we have now in hand.

"The distance from Fort William to North Bay is 650 miles. From North Bay to Montreal it is 360 miles. The Canadian Pacific will undertake to carry, with a fleet of their own, our Canadian grain from Fort William to North Bay, where it will be transhipped to Canadian Pacific cars, en route to Montreal."

THE proposition to remove the bones of Commodore John Paul Jones from Paris and bury them in Arlington cemetery will probably receive the sanction of Congress if all doubt can be removed as to the complete identification of the grave of the naval hero, which has been so long neglected that it has been really forgotten. The Secretary of the Navy will send to Congress the latest information in the department. The naval attache at Paris is still prosecuting his investigations, and expresses confidence that he will be completely successful in the end.

THE H. W. JOHNS CO. of New York City, manufacturers of asbestos, make a new use of that material as a cover for their catalogue for 1900. They show many novelties in asbestos and felt packing for steam and other pipes.

AROUND THE LAKES

PORT HURON.

Special Correspondence to the Marine Record.

Dunford & Alverson have commenced suit against Thomas Fish for $3,000, for repairs made to some of his boats.

Capt. R. Schaddeles, of Grand Rapids, an old lake captain, is dead. He sailed out of Holland for many years.

A large number of applicants for engineers' licenses are regularly undergoing examination at the office of the United States local inspectors of steamboats in the custom house.

The steamboat Conger made her first trip on the river route between Port Huron and St. Clair, on Monday. The boat will continue her trips until interfered with by the ice.

Capt. Harry Warwick, who represents Howard H. Baker & Co., ship chandlers, of Buffalo, has spent the week with the sailors in this city. Capt. Warwick has many friends with the sailors in this "neck o' the woods."

J. R. McCollom, of Welland, is at the Harrington. Mr. McCollom is one of the gentlemen who had the contract for dredging at the foot of Lake Huron two years ago. It is said he cleaned up a snug fortune on the job.

There arrived Jan. 15, at Alderman Ed J. Kendall's a young marine reporter, who has already laid claim to a job in the small boat on the river, so boys look out for a new man in the small boat on your first trip passing here.

Ronald Christner, one of Kendall's marine reporters, walked away from Harry Swain, an expert roller skater, in a race at the Auditorium on Wednesday. Ronald can get alongside the fastest steamer passing this port and it was not to be expected that he was going to take back-water from a roller skater.

The schooner Penokee, which was taken to the Atlantic coast in 1898 and ran on Romer Shoal, New York Bay, has been released, and is now lying at Stapleton, Staten Island. Her captain, William Summerville, has returned from a trip East, and says she is in the best of condition, and is good for another brush with the elements at almost any time.

A telegram was received here announcing the death of Alexander Stewart, at Sandusky, O. Mr. Stewart was formerly a well-known ship carpenter of Port Huron, but took up his residence in Sankusky about ten years ago. His son James and daughter May did not know of their father's illness until word of his death was received. He was 62 years of age. The remains were brought to this city.

U. S. Local Inspector of Hulls W. W. Stewart, remarking about masters long in service, said: "Capt. Henry Fish, of St. Clair, has sailed the lakes and rivers as captain of a steamboat for 47 consecutive years and only recently retired. His 44th renewal of his license is still in force. It is my opinion that no other man on the lakes can show as long a service as master of a steamboat as can Capt. Fish."

The Welland canal-sized steamer building here to the order of the Wilson Transit Co., Cleveland, will be christened Ravenscraig, after an old castle on the Frith of Forth, Scotland. She will be launched about the 1st of April and will be ready for business soon after she goes into the water, as her boilers and machinery will be in position when she is launched. The larger steamer building for Capt. Wilson will not come out until late in the season, according to the present outlook and calculation.

The engine of the steamer Harlem, which has been undergoing repairs at the Dry Dock Iron Works, will be shipped to the Craig Ship Building Co. at Toledo, on Friday, where it will be placed in the boat. The bottom of the Harlem is nearly completed and she will be ready for navigation by March, according to contract. A number of men from this city are working on the boat. The Fitzgerald Bros., who are the proprietors of the Dry Dock Iron Works, say that the Harlem's engine is as good as new.

ST. CLAIR.

Special Correspondent to the Marine Reeord.

The new steamer on the stocks of Simon Langell's yard is being pushed toward completion rapidly. Her keel was laid in the winter of 1897, but owing to the dullness in lake commerce the following season work was discontinued.

Captain Lowes, who is part owner of the steamer Tempest No. 2, will sail her again the coming season.

Capt. A. P. Gallino, who last season commanded the steamer W. R. Stafford, owned by the Hope Transportation company, has been appointed master of the steamer John C. Pringle, of the Otego Transportation company, with an advance in salary of $500. Captain Gallino is an experienced and skillful navigator, and has doubtless attracted the attention of the management of the company whose employ he enters in the spring by the uniform success which has always attended him in the management of his steamers and consorts heretofore. It goes without saying that he merits his advancement.

DULUTH—SUPERIOR.

Special Correspondence to The Marine Record.

Mr. Alex R. Sinclair, vessel and insurance agent, Duluth, has returned home after an eastern trip. He visited all of the prominent lake ports, and is of the opinion that next season will be a lively and prosperous one from every standpoint.

The head of the lakes flour mills produced 7,650 barrels of flour last week. Five hundred barrels were shipped for export and 3,275 for domestic use, making the total shipments 3,775 barrels for the week. The stocks amounted to 8,290 barrels on Saturday.

Bids will be opened under the second advertisement of the work at the office of Major Sears, Corps of Engineers, U. S. A., Feb. 28, for the construction of 350 feet of breakwater at Grand Marais, Minn. The bids under the first call were all above the appropriation for the work.

There is a little less grain in store here than at this time last year, say about half a million bushels, and there is 8½ million bushels in elevators now, receipts are still rather light, but country elevators will soon be shipping in enough to fill all elevators and then the chartering business will begin.

The Northern Pacific road has taken a long time contract to haul iron ore from Ashland to West Duluth for the Duluth Blast Furnace Company. The shipments will amount to about 125 tons a day and come from Iron Belt, Ashland and Colby mines situated at Ironwood. The Omaha road has been hauling Mesaba ore from Duluth to Ashland.

The tug E. P. Ferry, owned by King & Steele, contractors, burned on Sunday night and became a total loss. She was brought here from Chicago about two years ago and was used for towing cribs, etc., around the harbor, doing the work of her owners, who are government contractors. The old tug was well known on Lake Michigan and was considered quite a powerful tug in her best days.

There were twenty-one docks for handling iron ore on Lake Superior and Lake Michigan ore-receiving ports in 1896, these having 4,438 ore pockets, with an aggregate capacity of 617,250 tons. When navigation opens next spring there will be twenty-three docks, with a total of 5,061 pockets and a storage capacity of 834,082 tons. The net gain is 623 pockets and 215,832 tons storage capacity. Two of the docks that will provide this handsome increase are now under construction, the Eastern Minnesota dock on Allouez bay with 250 pockets and about 60,000 tons storage capacity, and the Duluth, Masabe & Northern dock No. 3 at Duluth, with 192 pockets and 38,400 tons storage capacity. The estimated cost of construction of ore docks is about $1,000 a pocket, but owing to an advance in the cost of materials the ore docks now under construction will cost about $1,500 a pocket.

SAGINAW, MICH.

Special Correspondence to The Marine Record.

Capt. Rayn Bell has sold or traded his barge Homer for a farm.

The tug Andrew McLean is being rebuilt entirely and a new boiler put in by Wick's Bros.

Frank W. Wheeler has announced his residence for sale and is going to move his family to Detroit.

The Gerry & Shannon fleet are all here and considerable work will be done before the opening of navigation.

The old barges Amaranth and Ferguson are to be rebuilt and again put in commission at F. W. Wheeler's boxes.

The barge H. W. Hoag is receiving new deck frames, decks and covering board, and considerable other repairs.

Capt. Pat Ryan was in town Monday. He states that he is getting along nicely with repairs to str. Madden at Manistee.

Capt. Louis Guard and son, also Capt. Clarence Miller, of Charlevoix, were in town Monday looking for boat machinery.

Captain Haskins was in town the other day. He reports extensive repairs on his steambarge, C. H. Davis, at Lorain, Ohio.

The Boutelle fleet are all receiving necessary repairs, especially the tugs, one or two of which will be taken to the coast in the spring.

Considerable trouble by caving in at Mr. Davidson's new dry dock, will necessitate much pile driving. She is a whopper, just the same.

Capt. Wm. Pierce's str. Benton is receiving repairs at McLaughlin's coal dock, Bay City. Capt. Henry Pierce will sail the Harvey Bissell the coming season.

I haven't noticed any boat sales here yet, but several parties have been here sizing the lumber fleet up. The owners all seem satisfied that there are still good times ahead.

Some junk fiend recently cut up and sold a $1,200 clam shell dredge dipper for Carkin, Stickney & Cram. I have since learned a local junk dealer gave $8 for it. The dipper had been left here some years ago by the firm.

A. C. McLean, the veteran vessel owner, is not idle this winter. Besides his aldermanic dnties and especially as one of the committee on municipal lighting, etc., his fleet is all being overhauled and put in shape for the spring business.

Ex-U. S. Boiler Inspector Mike Mahar has bought out his brother John's interest in the National Boiler Works, at Bay City, and is pounding rivets to beat the band. I thought so, at least, when I visited his shop, there was more noise than a Boer bombardment.

CHICAGO.

Special Correspondence to The Marine Record.

There have not been any grain charters since last week, and very little enquiry.

The schooner Cora A. is in drydock having her bottom calked. This is the schooner's first drydocking since she was built in 1889.

A sister ship to the steel tow barge Madeira, launched last week from the yards of the Chicago Ship Building Company, is in course of construction for the same owners, the Minnesota Steamship Co. (Pickands, Mather & Co.,) Cleveland. These vessels are 450 feet over all, 50 feet beam, 29 feet deep, and will carry 7,500 tons on a mean draft of 18 feet.

The members of Chicago Branch, No. 3, of the Shipmasters' Association; at their meeting last week, presented to past president Capt. George Tebo, a handsome solid gold badge with a miniature regulation flag numbered 79 attached, as a token of their esteem and appreciation of his valuable service to Branch No. 3 ever since it was established.

There will be quite a number of changes in the masters of steamers this spring. Capt. James Leisk, of Milwaukee, who is so well and favorably known, will let go his old command, the Helena, after sculling her along for a dozen seasons, to take charge of one of the 500-foot steel steamers now building for the American Steamship Company, Duluth, (American Steel and Wire Co., Chicago.) A change of masters in the Neosho is also on the slate.

CAPTAIN A. W. Gillman, superintendent of the Goodrich Transportation Co., and one of the most widely known men on the lakes, died very suddenly of apoplexy on a Chicago & Northwestern train as it was approaching Manitowoc, on Wednesday night, Captain Gillman had left Chicago in apparently his usual good health. He had been with the Goodrich Company since 1865, and was their superintendent since 1891. He was aged sixty-three years.

The Canada-Atlantic line has now a fleet of five steamers, three of which are under season charters at enormous figures, paying about half the value of a boat for a season's work. The fleet, so far, are the Arthur Orr, George Orr, Kearsarge, W. H. Gratwick and another boat. The present tonnage totals 21,000, whereas last season the line had only the five boats of the Menominee line under charter, carrying 17,000 tons. This means an increase, so far, of about 100,000 for the season. The Canada-Atlantic route is developing rapidly.

The grain weighmaster for the Board of Trade, H. A. Foss, very pertinently states that shortages must occur at one of three places—point of loading, during transportation, or point of unloading. The average shortage on vessels loaded at this port and unloaded at different lake ports east of Chicago, is three-eighths of a bushel per 1,000. Mr. Foss recently visited the following ports to see how his weights turned out during the season of navigation: Detroit, Cleveland, Erie, Port Huron, Buffalo, Goderich, Kingston, Prescott, Midland, Ogdensburg, Port Dalhousie and Port Colborne.

"Over on the cash side of the exchange the opinion is prevailing that some shippers in the market have had for the last two or three days a reduced rail rate to Baltimore and Philadelphia, which is likely to be made public within a few days. Over a million bushels of corn has been worked to the sea-board in the past two or three days, and a good many oats, and the people who have not been able to do the business are claiming that the prices show the business has been done on a concession. It is expected that a new tariff will be out before long, but that some are working on it already is beyond question."

The first official trip from Chicago to Lockport on the new drainage canal was made last Wednesday by the steamer Minnie B., Capt. Louis Hohmann, who had extended an invitation to 100 of his friends. The party left Chicago at 10:30 a. m. and arrived at the Bear Trap dam at Lockport at 3 p. m., where an enthusiastic crowd gave them a hearty greeting. After a short stay at Lockport, the party returned to Chicago, arriving at 9 p. m. The trip covered a distance of about 68 miles and was much enjoyed, the weather being splendid. Among those present were: Capts. Louis Hohmann, Dennis McCarthy, John Roberts, harbor master; Chas. Darrow, ass't harbor master; J. F. Hodell, R. Tyler, Louis Kiuhle, Wm. Robertson, Cleveland, M. McDonough, Cleveland, James Smith, Judge Thos. Bradwell, Paul Brown, ass't city engineer; J. M. Brown, M. J. Rouske, Danl. H. Robertson, Chas. Koenker, Thos. B. Banner, W. T. Lornley, Jas. T. Lonley. A. T. Linn, A. E. Letterman, Chas. Hinkleman, F. H. Trotter, Louis Moss.

MARINE CITY.

Special Correspondence to The Marine Record.

Capt. John Corrigan was in the city last week.

The shipyard of Alex. Anderson, at Marine City, is perhaps the busiest wooden shipyard on the lakes at this time. In addition to the rebuilding of the barge Aurora and extensive repairs on the Sakie Shepard, Mr. Anderson has a new steamer under construction, which he is building to the order of Capt. John Corrigan, for the general cargo trade. Her dimensions are 160 feet over all, 150 feet keel, 35 feet beam and 12 feet depth of hold, and will be constructed to carry a large deck load. Her machinery will be fore and aft compound, 12 x 22, with 14-inch stroke, built by Whitman, of Buffalo. She will be launched about April 1st.

BUFFALO.

Special Correspondence to The Marine Record.

Grand Lodge of the Shipmasters' Association went into annual session on Tuesday, Grand President Henry Leisk, of Milwaukee, presiding. There are nine lodges in the association, each of which sent one or two delegates. On Thursday night a ball will be given in Ellicott Square Club rooms.

The committee appointed to decide upon a grain contractor for next season has not yet decided when it will meet in Buffalo. One of its members, A. B. Wolvin, of Duluth, was in Buffalo a day or two ago, but nothing was done. Capt. Edward Smith of this city, secretary of the committee, says it may not meet for two or three weeks. Meanwhile, all sides are anxiously waiting to see the outcome.

The Union Transit Co. announce appointments this week as follows: Steamer J. M. Nicol, Capt. William McLean, engineer George E. Tretheway; Eber Ward, Capt. John L. McIntosh, engineer James Countryman; Avon, Capt. Norman McGuire, engineer Joseph Jamieson; W. H. Stevens, Capt. Alex. Clark, engineer J. E. McSweeney; Portage, Capt. John Tyrney, engineer George W. Haig; James Fiske, Jr., Capt. John Pearson, Engineer.

Capt. J. Donovan, Oswego, is rebuilding the schooner John R. Noyes and giving her new frames forward, new floor, ceiling, deck frames and decks, rail, stringers, stanchions, plank-sheer and new cabin. The Noyes has been well kept up, handled carefully and is one of the best vessels of her size and class to-day. She is still on her first letter in Inland Lloyd's Register, and it is expected that the rebuild which she is now undergoing will keep her there.

There is no doubt bnt that the labor troubles here last season in grain discharging is having some effect on the port as regards next season's shipments. A broker stated to me yesterday that some Chicago interests feel that grain should be consigned to any other port than Buffalo, especially as the status of the grain discharging question is even yet in such an unsatisfactory condition. It is probable that the Welland caual trade will be worked as actively as possible when grain shipments begin.

Capt. Marcus M. Drake addressed the meeting of the Grand Lodge of the Shipmasters' Association on the opening of its annual meeting here on Tuesday. On Wednesday a resolution was adopted asking the government to erect a light-house on Passage Island, Lake Superior. The motion for its adoption was made by Capt. Hubbard, of Chicago. The committee on resolutions introduced a measure appealing from a decision of Supervising Inspector-General Dumont that the sounding of two whistles when the engine already was backing meant to stop backing and go ahead. It had already been interpreted to continue backing and increase speed. The shipmasters' committee recommended that two whistles back whenever and wherever sounded.

The Courier said on Monday: "There was considerable weather 'in the air' yesterday. Forecaster Cuthbertson said it was coming, as early as Saturday morning, although Chief Moore, of the Weather Bureau, did not order up the cold wave signals until yesterday morning. And so, in view of all the unkind things said about Mr. Cuthbertson during a year, in the way of kicking on the kind of weather that comes when he says it will, as well as being ruffled when he says it will be fair, and straightway there is rain, it is certainly to his credit that he cast about and encountered this cold wave twenty-four hours before his superior thought it was worth signaling." This might lead some people to think that Cuthbertson could do better in Washington than he is doing here.

At a meeting of the Trustees of the Merchants' Exchange held on Monday, January 22d, Junius S. Smith was re-appointed weighmaster for the current year. The price for weighing grain is twelve cents per thousand bushels. Mr. Smith's resume of last season's work is summed up as follows: Icy lakes in April; grain shovelers' trouble in May and June, with later effect; enormous use of tonnage for ore; unsettled and uncertain ocean freights; a car famine; and utterly inadequate canal facilities, combined to reduce the receipts of grain, etc., at Buffalo by about thirty per cent as compared with 1898. The average shortage was a peck per 1,000 bushels. About two hundred scale tests were made, and checks kept on the work of the elevators at loading points, as well as here.

W. J. CONNERS, head of the Montreal elevator syndicate, was born 42 years ago in Toronto. His father, P. Conners, was educated at St. Michael's College, Toronto, in the early forties and was afterwards a mail agent on a line of steamers running between Toronto and Montreal. W. J. acquired a seafaring taste on Lake Ontario; sailed on the Great Lakes for a number of years; was employd on the docks in Buffalo; was a stevedore and developed into a contractor and shipowner; employs during the season of navigation in Buffalo, Chicago, Milwaukee and Gladstone, Mich., about 6,000 men; owns two newspapers in Buffalo, the Courier and the Enquirer: is well known among lake shipping men; is regarded as a shrewd man of business and good at making a bargain; likes to get fair play and to give it; commands lots of money, but never advises other people to invest capital where he will not invest his own; thinks the Harbor Commissioners wanted to drive a hard bargain, but has tremendous faith in the elevator project for Montreal.—Montreal Herald.

In the annual statement of the President and Board of Managers to the Lake Carriers' Association the matter of a marine humane society was brought up. The association thought favorable of the project and referred the matter to the executive committee, which shall act and decide upon it. The society is to secure a suitable recognition for persons who have endangered their lives in saving those of others. The attention of the association was called to the fact that the Great Lakes have but a poor showing in life-saving medals, not because there has been no acts of heroism here, but because the cases have not been urged on the proper officials. The association promised its aid in securing some reforms in the matter. President Firth outlined the manner in which the work could be carried on. The Shipmasters' Association as well as the Marine Engineers' Society and the Harbors of Masters and Pilots ought to have taken up such a measure long ago. The engineer of the Sacremento was entitled to a vote of thanks last season and would have been recognized by the Treasury Department if the matter had been brought to its attention, as the RECORD suggested at the time, but as usual what is everyone's business is no one's. Humane societies for dumb animals are established and supported in each lake city but no one cares about ameliorating the condition, or encouraging special individual acts of kindness, pluck, heroism or bravery, perpetrated by lake-farers. By and by no one will care about even getting wet socks to save a life, much less either ship, cargo or property.

CLEVELAND.

Special Correspondence to the Marine Record:

Capt. L. S. Sullivan, Toledo, owner of the independent tug line at that port, was here on business this week.

A block of coal was chartered this week for Manitowoc at the 60 cent rate, the same figure is offered to Sheboygan, but there seems to be no rush to charter.

There has been considerable ice formed off the harbor this week and some difficulty has been experienced at the water works crib through needle ice preventing a free flow.

The marine engineers affiliated with the M. E. B. A. will hold their annual ball in the Chamber of Commerce hall next Tuesday evening. A large and select attendance is already assured.

Capt. W. A. Collier will resign his office of grand secretary of the Shipmasters' Association owing to a pressure of business in other directions. Capt. Collier is manager of the Great Lakes Towing Co.

Cleveland has done fairly well in shipping hands for naval service during the past few weeks. Since the office was opened here, 200 men and boys have been sent to the coast. The shipping officers have now been ordered to New Orleans.

The Masters' and Pilots' Association will hold an open meeting and a smoker on Monday, February, 13. The association has been holding regular weekly meetings for some time. It was decided to have one social session upon the above date.

There has been some inquiry in a quiet way for lumber carriers here this week and the rate of $3 per M feet was talked of. It is not known that any charters were made on this basis, shippers and brokers are still wide apart on figures for future charters.

The Canada-Atlantic line has chartered the steamer Kearsarge, Capt. Robt. McDowell, for the season, at a lump sum of about $80,000. The Kearsarge has been managed in the office of Pickands, Mather & Co., under the title of the Interlake Transportation Co.

Mr. Alex R. Sinclair, vessel agent, Duluth, left this port on Tuesday en route for home. In calling upon those interested in lake marine affairs, Mr. Sinclair finds that the best possible hopes are entertained for a prosperous coming season right up to the close of navigation.

The Iron Trade Review publishes a supplement this week showing the Lake Superior iron ore shipments, for the past 44 years. Imitation is said to be the sincerest form of flattery, so the Iron Trade Review will be flattered by other journals reproducing their supplement at a later date, or, such has been the case each year, hitherto.

With the exception of four Welland canal-sized steamers, two of which are building for the American Steamship Co., one for Mr. W. C. Rhodes and one for Capt. Thos. Wilson, all the steamers that are being built at the lake shipyards are large carriers. The four vessels named are the only new boats that are anywhere near as small as the 3,000-ton class.

Colonel Smith, Corps of Engineers, U. S. A., in charge of the conservancy and improvement of rivers and harbors within this district, is a firm believer in stone and concrete for piers and breakwaters, as opposed to pile driving and timber work, especially on the question of superstructures is the Colonel convinced that the more durable and sightly material is also the most economical in the long run. I once heard it mentioned that in the down East district which the Colonel had charge of before being detailed to Cleveland he was known among a clique of professional and army engineers as a "concrete crank."

The classing of steamers so as to grade engineers' pay don't meet with their approval, nor does the publication of the wages card each season. The terms on which masters are engaged are not made known and engineers expect the same consideration. As was stated to me the other day, "the engineer runs one end of the boat and the master the other, and the less friction or conflict there is between the two chiefs the better it is all 'round. The master has his place, and that's on deck; the engineer has charge of the engine." Another engineer said that he was tired of seeing discriminations made between the ends of a boat and he hoped to see the matter settled once for all.

At the annual meeting held at this port last week the managers of the Great Lakes Towing Company decided to make the number of men employed on their tugs uniform and hereafter all the harbor tugs, large and small, will have four men, a master, engineer and two men to fire and handle the lines. Another step involves the establishment of a sort of civil service rules or co-operation plan on the tugs. The managers decided that hereafter a man once in the service of the company is always to be considered in the same service unless he should happen to fall under the ban and be discharged for some misdemeanor. There will be no hiring of men, therefore, after they have been once employed and their services prove satisfactory. It has been decided also to give a bonus to employes who retain their positions throughout the season. Masters are to receive $50, engineers $40, and firemen and linemen $25. The company will operate 100 tugs the coming season, and if the crews remain with their respective boats the bonus money will amount to $14,000. This seems a large amount to cull out of the net earnings of the towing fleet, but the principle has been found a good one. The tug owners might have gone a step further and made the bonus progressive after the first year. The master and engineer by placing their bonus money together couldn't own the tug then under fifty years and by that time ærial power will be dominant.

DETROIT.

Special Correspondence to The Marine Record.

Capt. Alex. J. McKay will no doubt be elected grand president of the Shipmasters' Association, at the annual meeting now being held in Buffalo.

Harvey D. Goulder, Esq., Cleveland, is here this week, as counsel in the Lansdowne-Morley collision case. Frank Masten, Esq., of the firm of Goulder, Houlding & Masten is also here.

Since the cold snap set in, ice about half a foot thick has formed in the river between Detroit and Windsor, but as yet the ferry boats are making their regular 10-minute trips. The only difficulty thus far experienced has been in reaching the docks. On either side of the river there is a good deal of broken ice wedged against the landings.

A couple of attorneys got a sorter "jammed in a bight" here this week. It appears that they are the counsel in a case that had been set for trial at the present term of court. One of them moved for a continuance until the April term and said he could not possibly tak- it up earlier because his witnesses are all lumbermen away in the north woods and will not come out until navigation opens in the spring. The other rejoined that he could not possibly take the case up after navigation opens, because all his witnesses are sailors, and will then be away on the lakes, and scattered from Ogdensburg to Duluth.

COLLINGWOOD, ONT.

Special Correspondence to The Marine Record.

J. & T. Charlton, lumber merchants of Tonawanda, have bought the old Christy, Kerr & Co. mill to the west of the harbor and will immediately put in new machinery. They intend to be ready for this season's cut and will employ 150 men. This mill has been in disuse for a long time. This indicates the boom in the lumber industry, and the effect of the duty placed on logs for export.

The new steel shipyards are rushing their arrangements, buying machinery and getting ready for an early start. The company has engaged an expert designer with a large experience, and also experienced men for managers of the different departments. There will be a busy season at this end of the lakes this year, and outside people are already locating at this point as work is expected to be plentiful.

The Ontario Department of Fisheries contemplates increasing the license payable by each fishing tug in use in provincial waters from $25 to $50. There are about eighty tugs that would be affected by the increase, and most of these are in operation in Georgian Bay, Lake Huron and Lake Superior. Originally the Dominion Department of Fisheries exacted a fee of $50 in respect of fishing tugs, but for some reason or other the amount was reduced to $25. Now that the Province has jurisdiction in such matters it contemplates reverting to the higher figure.

Congressman Minor is a standard authority on all questions pertaining to marine matters on Lake Michigan and Green Bay, and his colleagues refer all questions of that character to him for solution.—The Advocate, Sturgeon Bay.

Last week it was reported that J. J. Hill, president of the Great Northern R. R. Co., would place four steamers, of large cargo carrying capacity, in the Pacific trade out of a Puget Sound port. This week the item is sent out from Chicago that within the next five years the steamships to be operated between points on the North Pacific coast and the Orient, in connection with the Great Northern railroad, will number 25. The vessels to be among the largest in ocean service, and to have a speed of 12 to 14 knots an hour. At present, eight of them, either are in course of construction or contracted for, and as soon as they leave the shipwright's hands they will be pressed into the new service. The trade developed on Puget Sound will be, in a measure, tributary to the lakes, and the Great Northern R. R. will handle an enormous transcontinental trade bound west.

IN FAVOR OF THE SHIPPING BILL.—ENDORSED BY THE NATIONAL BOARD OF TRADE.

The National Board of Trade, held its annual session at Washington, and adopted the following resolutions, which, as will be seen, gives a most hearty approval and indorsement to the shipping bill now before Congress:

On the report of Alden Smith, the Board by a large majority recommended to Congress the establishment of another executive department to be known as the Department of Commerce and Industry. The Board favored the enactment of Senate bill No. 738. In making his report, Mr. Smith said that the industrial and mercantile interests of the country are of such vast importance as to imperatively demand the establishment of such a department. The following resolutions were also adopted:

"Resolved, that the National Board of Trade earnestly favors the adoption of an American system of navigating naval reserves, and urges upon Congress the passing of a law providing for the creation of the same.

"Resolved, that the National Board of Trade reiterates its action on former occasions, and respectfully urges on Congress the grave importance of enacting a national trade registration law at the earliest moment possible."

The following resolution respecting our merchant marine was added:

"Whereas, United States vessels in 1826 carried 92 per cent. of the nation's imports and exports, 81 per cent. in 1845, 75 per cent in 1856, and only 8 per cent. in 1899, showing a lamentable decline in our merchant marine in the foreign trade owing to the fact that it is conducted on a free trade basis, and

"Whereas, the tonnage of vessels in the coasting trade in which foreign competition is absolutely forbidden increased from 722,330 in 1826 to 1,223,218 in 1845 and to 2,247,663 in 1856, and to 3,965,313 in 1899, thus demonstrating the ability of this country to meet all of its needs in the matter of shipping when properly protected; and

"Whereas, the United States is now paying to foreign ship owners nearly $200,000,000 annually to do our ocean carriage trade, which sum increases yearly; and

"Whereas, the enormous decliue in our ocean merchant marine is due to lower wages paid abroad and to the subsidies paid by foreign governments, and,

"Whereas, the foreign principle should be extended to our shipping in the foreign trade; that it may be built up as has been the case in other industries, including our coastwise shipping; and,

"Whereas, the profitable employment of the surplus productive powers of the farms, factories, mines, forests and fisheries of the United States imperatively demands the increase of its foreign commerce; and,

"Whereas, the merchant vessel officers, engineers, machinists, electricians and seamen necessary to the increase of the commercc of the United States are also essential as auxiliary to the forces of the United States in time of war and otherwise, and to the better security of the nation and the protection of its possessions; and.

"Whereas, it is deemed especially expedient to make immediate provision to these ends; therefore,

"This memorial of the National Board of Trade, assembled in Washington, Jan. 23, 1900, respectfully presents to the Honorable House of Representatives and Senate of the United States that the delegates now here representing all sections of our country find it to be a matter of supreme interest that our foreign exports have now reached the largest figures ever known and offer further opportunities for increase in still wider fields.

"To give force and emphasis to these opportunities, to give some permanence to the exceptional advantages of the past year, this country needs a revival of its merchant marine.

"Your memorialists, the National Board of Trade, respectfully represent that the Frye Senate bill or the Payne House bill will be effective to this end. The principles embodied in these bills have met the approval of the President of the United States, the Secretary of the Treasury and the Commissioner of Navigation, and they have been indorsed by nearly every trade and commercial organization in the country, and by the press, to an extent which shows an overwhelming sentiment in their favor.

"The argument for an American merchant marine has had the further distinct recommendation of foreign delegates to the recent export convention as essential for the further cementing of trade relations with the countries they severally represented.

"In view of these considerations, your memorialists, the National Board of Trade, look with confidence for your early and favorable action on this subject."

CHICAGO NAUTICAL SCHOOL ALUMNI ASSOCIATION.

Thirty graduates of the Chicago Nautical School gathered at the Sherman House last Thursday night and held the first annual reception and banquet of the alumni association. F. W. L. Humphrey, '95, the first graduate of the school, acted as toastmaster. Lieutenant G. E. Gelm, U. S. N., of the Hydrographic Office, was the guest of honor, and responded to the toast, "Our Navy." Other toasts were: "The Chicago Nautical School," Lieutenant W. J. Wilson, principal of the school; "The Yachtsmen," C. B. Darling; "The Lake Marine," Captain Edward Kohnert and Captain Walter Hamilton. Members and alumni of the nautical school were with Dewey, Sampson and Schley during the war with Spain. Lieutenant Commander H. R. Greenlee of the naval militia and on the staff of Commander Shaffner was also a guest at the banquet. The Chicago Nautical School Alumni Association was organized and the following officers elected: President, Walter Hamilton, '95; vice president, C. B. Darling, '98; secretary, Thomas L. Page, '98; treasurer, J. E. Scully, '98; board of directors, James Travis, '96; A. W. Sterrett, '98; C. H. Greenlee, '99; E. R. Mason, '97.

VISIBLE SUPPLY OF GRAIN.

As compiled for THE MARINE RECORD, by George F. Stone, Secretary Chicago Board of Trade.

CITIES WHERE STORED.	WHEAT. Bushels.	CORN. Bushels.	OATS. Bushels.	RYE Bushels.	BARLEY Bushels.
Buffalo	2,217,000	312,000	154,000	81,000	951,000
" afloat	538,000	205,000	.....	.....	.....
Chicago.	15,043,000	4,795,000	1,357,000	213,000	32,000
" afloat	85,000	1,167,000	158,000	.....	.....
Detroit	571,000	376,000	95,000	9 000	53,000
Duluth	7,277,000	340,000	183,000	366 000	160,000
" afloat	248,000	.....	.....	.....	.....
Fort William, Ont.	2,897,000	.....	.....	.....	.....
Milwaukee	244,000	.....	.....	9,000	4,000
Port Arthur, Ont.	235,000	.....	.....	.....	.....
Toledo	1,162,000	662,000	147,000	7,000	.....
Toronto	69,000	.....	4,000	....	57,000
Grand Total	55,597,000	14,526,000	5,332,000	1,163,000	1,760,000
Corresponding Date, 1899	28,583,000	27,139,000	7,025,000	1,441,000	3,335,000
Increase	.....	382,000	244,000	.....	.....
Decrease	939,000	.....	.....	50,000	160,000

While the stock of grain at lake ports only is here given, the total shows the figures for the entire country except the Pacific Slope.

FIRST CARGO CHICAGO WHEAT.

Interesting reminiscences of Mr. Ogilvie's first visit to Chicago have been made public. Says the Grain Dealers' Journal. Mr. Ogilvie followed the railroad, and when completed to Galena bought grain up and down the Mississippi. "I will always remember my first trip to Chicago," Mr. Ogilvie said, "because it was made under snch peculiar circumstances and roundabout way. It was during the winter of 1855 when I went to that city to buy wheat. I left Montreal, going to Rouse's Point, thence to Ogdensburg, from which place I drove to Rochester in a sleigh. From Rochester I went by train to Cincinnati, and then to Logansport, Ind., where I took a cut across the country to Michigan City, the principal attractions of which at that time were the trading stations and the famous Hoosier slide, which I understand has since been cut down in a number of places. From Michigan City we went to Chicago on a construction train. I knew Mr. Hutchinson, known the world over as 'Old Hutch,' in connection with his enormous speculations in wheat and pork. He was a quaint character, and understood by few. Another man whom I knew was George Steele, who dredged out the Chicago river and built the first elevator in Chicago. He was for many years the representative in the city by the lake, and was among the first to erect a dwelling on Michigan avenue. When I first went to Chicago the money with which the first cargo of wheat was bought was brought from Montreal in a trunk. The cash was all in Bank of North America bills, which were the only Canadian bank notes the sellers would accept at that time."

THIS is the way they talk of lake craft in New London, Conn. "The old Laker George Farwell, is not disappointing me, at least. This old steamer, recently brought to this coast, has been one trip south and is so badly knocked out that she is undergoing repairs in New York. Old Lakers aren't just the thing for rough Atlantic waters."

THREE MASTED SCHOONERS.

"Some history of lake shipping and much information about the enormous trade of the Great Lakes," is the subject of an article in Ainslee's Magazine.

"At the time of the battle of Sandusky the typical lake vessel was a single masted craft of some 100 tons burden, able to nose her way up into creeks and shallow harbors, and light enough to be dragged into her dock, when necessary, by a yoke of sturdy oxen. Nowadays the bustling little harbor tug has taken the place of the primitive ox, and the little one-master has been superseded by the whaleback and the twin-screw steam barge. Before that time, of course, there had been sailing craft on the lakes. But it is a far cry from the day of the aboriginal Indian 'dug-outs' and the batteaux of the early French explorers, to the period of such palatial passenger steamers as the North Land and the North West.

"The first American vessel on Lake Erie was the Washington, built near Erie, Pa., as early as 1797. In the next year the Jemima was put together three miles below Rochester by one Eli Granger, and was the first of our vessels to plow the waters of Lake Ontario. It was not until 1817 that a steamboat appeared on the lakes. This was the Ontario which was made after the model of the Sea-Horse, then running on Long Island Sound. During the following year the Walk-on-the-Water appeared and surprised the marine world by steaming from Black Rock, New York, to the prosperous little town of Detroit. It was a clumsy but a wonderful thing, that primitive side-wheeler, with her belching funnels and cranky machinery, for on her first trip, we are told, she was greeted with cheers and cannon at every port into which she put. Her journey took her five days, and her passenger list was limited to twenty-nine, but she was a slight improvement on that original canal boat, with a great upright engine in her hold, which constituted the first lake 'tug.'

"It was on the Great Lakes that the three-masted schooner first made its appearance. The unique character of lake navigation created the necessity for this type of sailing craft, because of the fact that with this class of vessels sailors could handle the sheets from the deck at times when it was impossible to go aloft in one of those sudden storms which make the life of the lake skipper an uncertain and anxious one.

"But in time, the screw propeller made its appearance and the triple-expansion steamer at last elbowed the sailing vessel out of her time-honored place on the lakes. The dethroned sailing craft, once on the downward path, degenerated into the barge. She became the weaker vessel to her puffing husband, and dared not venture up the Detroit, or the St. Clair, or the 'Soo,' without a friendly line from her portly spouse, swaggering along in the consciousness of his big boilers and twin screws. But in time, forsooth, he took to polygamy, and instead of taking in tow his one helpless schooner, he attached unto himself half a dozen dependent sister craft, and today he may be seen puffing importantly up and down river and lake with his five or six schooners trailing meekly behind him."

UNTIL the end of 1898 Great Britain was the largest coal producing country in the world. In 1899 the United States surpassed her and is to-day the peer of all. In round figures the output of coal—bituminous and anthracite, last year was 245,000,000 tons, which is a practical gain of 50,000,000 tons over 1898. This is an industrial triumph for which the whole country is to be congratulated, as it means much in the race for the business supremacy of the world. As many of our readers are aware, the principal reason for the great growth in coal production last year was the immense increase in the iron output. In round figures the production of pig iron in 1899 was 13,650,000 tons, an increase of 1,900,000 tons over 1898. A further increase in both iron and coal is expected in 1900. Practically speaking, the deposits of iron ore and coal in the United States are limitless. Probably this country will never have a successful rival in the products of either. The possibilities for expansion in these two products in this country are immeasurable. Coal and iron lie at the basis of a country's industrial strength, and this determines its physical power. The United States is undoubtedly destined to hold its lead in both products. It will maintain its supremacy as a manufacturing country. In all the elements of material potency the United States will probably lead the world forever.—The Black Diamond, Chicago.

THE QUESTION OF LICENSING OFFICERS.

The RECORD printed last week a copy of bill (H. R. 1040) to amend Section 4445 to Title XII of the U. S. Revised Statutes relating to the licensing of the officers of steam vessels. The bill provides for a maximum penalty of three years in prison and a maximum fine of $500 if anyone misstatesfacts when applying for a license, or in any way altering a license. As only a week has elapsed, the views then expressed in the RECORD will be fresh in the minds of our technical and otherwise interested readers. We have since received the following communication:

WASHINGTON, D. C., January 28, 1900.

Editor THE MARINE RECORD, Cleveland.

My attention has just been called to the issue of THE MARINE RECORD of January 25, wherein, on page 13, you indulge in harsh criticism of my efforts on the floor of the House to carry into legal effect the unanimous report of the Committee on Merchant Marine and Fisheries, of which I happen to be a member. I was directed to submit the report of the committee to the House and ask the passage of the bill.

You have probably not been advised that the Marine Engineers' Benevolent Association of the United States, through their president, Mr. George Uhler, prepared this bill and handed it to me with the request that I introduce the same and secure its passage if possible.

I desire also to state that Mr. Uhler came before the committee and gave some very strong reasons why the bill should be passed.

The marine engineers have within the past week held their annual national meeting here in this city. I met a number of these gentlemen, and each and every one of them with whom I had any conversation at all, expressed the hope that the bill would pass.

I am pleased to hand you herewith my report on this bill, which, by the way, is substantially Senator Frye's report from the Committee on Commerce in the Senate to the 55th Congress—I hope you can give this report in your next issue, —because on the strength of the report that Senator Frye made, the Senate passed the bill, but it was not reached in the House because of a great press of business growing out of the Spanish war. You are somewhat severe on me because I recommended the passage of the bill, and accuse me of casting aspersions on U. S. local inspectors of steam vessels. In this connection, I beg to invite your attention to the letter of Inspector-General Dumont that is made a part of my report. The Inspector-General says, among other things: "The object of the bill is to provide legal means of preventing fraud in obtaining licenses by persons applying for license as steamboat officers, and for punishing officers who after receiving license fraudulently, and by forgery increase, by interlineation or otherwise, the conditions originally stated on the face of such license." Again the Inspector-General says: "The fraud referred to has been of frequent occurrence, and it has been found that there is not at present any legal means of prevention or punishment." Inspector-General Dumont desires the passage of the bill for betterment of the service, and it seems to me in view of what he states, that it is pretty hard to find lodgment for an objection to it, and I am quite sure that he is not reflecting on local inspectors; and, in agreeing with him on this proposition, neither Senator Frye, General Grosvenor or myself, thought for a moment that we would be criticised by anyone interested in our merchant marine and the efficiency of its licensed officers. Referring to your further criticisms of my lack of knowledge of how licenses are issued and obtained, I desire to say that there are many things connected with the merchant marine, and especially laws governing the same, that perhaps I ought to be more familiar with, but I think you will agree with me that I have at least a limited knowledge of licenses when I say to you, that I was licensed as a master many years ago; that I was an owner of steamboat property for eleven years prior to my coming to Washington as a member of the 54th Congress, during which Congress I served as a member of the Committee on Merchant Marine and Fisheries.

It may not be out of place to say that I began my steamboat experience as a boy in 1858 on a steamer sailing out of the port of Cleveland. I send you this communication, together with my report on the bill, not because I have any feeling in the matter, but to get the facts fully before you, that you may know I am acting jointly with officials of the government and members of Congress of both Houses in trying to secure the passage of this bill. I cannot believe that the Inspector-General and the legal department of this government, are ignorant of what is needed, nor that they desire to "cast aspersions on local inspectors" any more than do I.

Sincerely yours,

E. S. MINOR.

The report on the bill as mentioned in Mr. Minor's letter is as follows:

The Committee on the Merchant Marine and Fisheries, to whom was referred the bill (H. R. 1040) to amend Section 4445 of Title 52 of the Revised Statutes of the United States, having duly considered the same, recommend the passage of the bill.

The reasons for this recommendation will be found in the accompanying letter:

Treasury Department, Steamboat Inspection Service.
Office of the Supervising Inspector General.
Washington, D. C., April 15, 1898.

SIR:—I have the honor to acknowledge the receipt, by reference to this office for report, of a communication dated the 13th instant, from the Committee on Commerce, United States Senate, inclosing Senate Bill 4391, Fifty-fifth Congress, second session, entitled "A bill to amend section forty-four hundred and forty-five, of title fifty-two, of the Revised Statutes of the United States," and requesting the Secretary of the Treasury to furnish the committee with such suggestions as may be deemed proper touching the merits of the bill and the propriety of its passage.

I have the honor to report thereon that the object of the bill is to provide a legal means of preventing fraud in obtaining licenses by persons applying for license as steamboat officers, and for punishing officers who after receiving licences fraudulently and by forgery increase, by interlineation or otherwise, the conditions originally stated on the face of such licenses.

The fraud referred to has been of frequent occurrence, and it has been found that there is not at present any legal means of prevention or punishment.

The attention of Congress has been several times called to the necessity of legislation such as indicated in the bill under consideration, as may be seen from the following abstract from the report of 1897:

It is desirable that the attention of Congress be again called to the recommendations of this office in its annual reports for 1891, 1893 and 1894, to provide against the immunity from punishment for forging or interlining certificates of license as masters, mates, pilots and engineers of steam vessels, or for making false oaths in the application for such licenses.

It was supposed that persons committing forgery or perjury in the matter stated, could be punished under existing statutes, but the honorable the Attorney-General decided otherwise, as may be seen from the opinion of that officer in letter dated September 17, 1890, which is quoted in full, as follows:

Department of Justice,
Washington, D. C., September 17, 1890.

SIR:—Answering your letter of the 13th instant, in which you ask whether the alteration of a license to an engineer, issued under Section 4441 of the Revised Statutes, so as to give the license the appearance of a higher class than that for which the license was actually issued, is a forging of a public record for the purpose of defrauding the United States, under Section 5418 or Section 5479 of the Revised Statutes. I have the honor to say that, in my opinion, such alteration is not within the sections mentioned, nor within Section 5423, the crime described in which is more closely allied to the misconduct stated in your letter. So far as I have been able to investigate the statutes, the only possible punishment provided by law is the revocation of the license, under Section 4450.

I agree with you that the importance of that subject demands that Congress should be asked to supply the omission in the statutes and provide a punishment for such misconduct.

Very respectfully,

WM. H. TAFT,
Acting Attorney-General.

The Secretary of the Treasury.

In conclusion, would say that there can be no question of doubt "touching the merits of the bill and the propriety of its passage."

The copy of bill is returned herewith.

Respectfully yours,

JAS. A. DUMONT,
Supervising Inspector-General.

The Secretary of the Treasury.

We may first state our regrets at the apparently harsh criticism of the proposed measure, in so far as Congressman Minor is concerned. In the next place this appears to be a bill prepared by Mr. George Uhler, presiding officer of the Marine Engineers' Benevolent Association, but destined to affect masters, mates and pilots in a greater degree (according to the ratio of members) than marine engineers. Another feature, is the letter submitted by the Attorney General to the Secretary of the Treasury, dated ten years ago, and relating to misconduct on the part of an engineer, which has been talked about ever since. We grant that Mr. Uhler is an earnest, energetic worker in his own sphere, yet we can hardly believe that he is called upon to frame an amendment to a United States Revised Statute affecting the interests, more or less, of a numerous class of men sailing on the lakes with whom he has no affiliation, personal interest or knowledge of their duties. The statement of the Supervising Inspector-General of Steamboats, that "the fraud referred to has been of frequeut occurrence" argues a lack of supervision on the part of the revenue cutter service and the boarding officers, the custom house officials granting clearances, the owners engaging masters, the masters signing on pilots and chief engineers hiring assistants and so on through the list from top to bottom. There ought to have been a penalty clause in the original bill, but three years imprisonment is rather too radical a penalty to inflict at this late date, when, by a glance at an alphabetically arranged list the license held by any certificated officer can be ascertained by the boarding officer of the Revenue Marine Service, or when the vessel is cleared by the Collector of Customs, not to mention the supervision of vessels' certificates, officers' licenses, etc., carried on by the local inspectors of steamboats within each district. It is clearly understood that the intended amendment to the statute, primarily and almost exclusively affects the lake and river service. It is further granted that local inspectors have not been vested with the power to administer oaths except in cases of investigation, nor is any required.

If the RECORD'S criticism of Congressman Minor's action in the matter of pressing this revision of this law affecting licensed officers, seemed harsh, as, in view of Mr. Minor's technical knowledge and experience, it may have been, we desire to state that it was the measure more than the man that our remarks applied to, at the same time, a certain onus rests on the shoulders of the person advocating any innovation, and especially so when seeking to change an old established law. The RECORD will never decry or speak derogatory of any measure or project without being in a position to present a better plan, and we herewith suggest that the pigskin, sheepskin, vellum, parchment, or whatever material is used to show that a man is permitted to work at a certain calling for a mere, ordinary pittance per diem, be in future so framed as to prevent any interlineation or other alteration, as for instance, after the manner in which our paper monetary system is carried on. Those whose occupation and calling is upon the waters, are not, and never were or will be, very skilled forgers, rather are they rough knots very easily untied.

INCREASE THE PAY OF LIGHT-HOUSE KEEPERS.

We have received the following communication, as printed in the News, Port Austin, Mich.:

"The warning beams of the light-house guides the mariner on his way. To the mariner the light-house is a signal of promise; far away over the foaming wave he watches for its reflection, its flashes as it revolves tell him where he is the darkest, stormiest night. On the faithful light-house keeper and his assistants a great responsibility rests, lives and property may be wiped out forever should he fail to do his duty. For many years the light-house keeper has labored at his work for Uncle Sam, a position of great responsibility, the salaries paid have long been inadequate for the services rendered. In comparison with other branches of the Government service, such as mail clerks, customs officers, department clerks, life savers, etc., the light-house service is underpaid. There has been no adjustment in salaries for light-house keepers in many years. Prosperity is abroad in the land, but prices have also advanced, and the light-house keeper and assistants with an inadequate salary eke out an existence at all the way from a dollar a day up to two dollars a day for isolated lights. A move is now being made to interest the present Congress in a re-classification of the present salaries paid light-house keepers, to the end that they may receive salaries in proportion to those paid to other Government officials. The News joins in the move and hopes it will be successful."

The MARINE RECORD heartily endorses the foregoing suggestion. So, for that matter, has the Light-House Board and its succeeding officers from term to term. The heads of the service, including naval officers detailed to light-house duty as inspectors, etc., receive their regular pay, but the keepers have been relegated to the realms of departmental obscurity and have no friends at court, or champion in the halls of legislation. The RECORD has frequently set forth the claims of light-keepers for a fairer salary, but some time ago we arrived at the conclusion, that since the class, as a whole, was not a factor in the field of politics, Congressmen could easily and cheerfully ignore their just claims on the Federal Government. Senators and Congressmen have taken up the cudgels in behalf of other departmental employes but the light-house keepers have been and are still waiting for their saviour.

MARINE RECORD

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CLEVELAND, O., FEBRUARY 1, 1900.

CONGRESSMAN WADSWORTH will have to work hard to release that Weather Bureau re-construction bill from the rut that he seemed to drive it into, despite the overwhelming endorsements which the measure received from all sources.

ANYONE in wrongful possession of a steamboatman's license should be punished. The fellow that lets it go wrongfully should be suspended. The license of an incompetent should be revoked, how many such have been given out?

INSTEAD of penalizing candidates who undergo a voluntary examination to secure a license as a steamboat officer let the man wrongfully using such a license be fined or imprisoned. The grantor of the license should see that the grantee is competent, then punish the fellow "who steals what isn't his'n."

DUNKIRK, N. Y., is on the south shore of Lake Erie, if anyone should inquire, $900,000 has been already spent on its harbors and another $75,000 is asked for. California, Oregon and Washington will help pay for this breakwater, if it is built, but the donation won't do them a cent's worth of good. The citizens of Dunkirk must be good tappers—of the U. S Treasury.

SURELY local inspectors of steamboats are not getting ready to lay back in their offices and grant licenses to officers of steamboats solely on the strength of the candidate's affidavit, or affirmation, or the weightiness of his letters of reference, or testimonials. If so, they are taking a step backwards and picking up the old style instead of advancing. Local inspectors of steamboats can surely tell, after a few hours', or days' examination, if the would-be sailor or engineer is an impostor, or not.—otherwise.

THERE is quite a furore being raised, chiefly at the minor lake ports, on account of there being no river and harbor bill to be brought before this session of Congress for lump sums, or appropriations on the continuous contract plan. Such a "tempest in a tea pot" sort of a ripple is made in some quarters, that it would almost be in order to ask what these projected improvements are worth to the locality, or rather, how much money, or to what extent they would be willing to contribute in order to facilitate an increased commerce reaching their docks. Half in a spirit of contradiction, we may say, that Uncle Sam is paternally generous to his national proteges, but he can only return that which he receives, and little communities should not expect the entire Union to be taxed solely for their immediate benefit. Nor should the federal purse-strings be loosened, only for, and when, adequate national returns are, at least, susceptible of demonstration.

MAINTAIN LAKE LEVELS.

With the advent of cargo carrying steamers having the general hull dimensions of 497 feet in length, 52 feet beam and 30 feet in depth, the question of maintaining lake levels is of more vital importance to the commerce of the Great Lakes and the vast country and territory tributary thereto, than any other subject affecting the industrial and commercial welfare of the northern Middle and Western States.

This season, for the first time in the history of lake shipbuilding and transportation, will steamers closely approximating 500 feet in length be put afloat on the lakes, and, as a national industry, one also which is very much in evidence in the country at this time, we can but look to our government at Washington for a conservation of the rights of free, facilitated, untrammeled and unhampered methods, whereby the vast commercial, industrial and transportation interests of the illimitable West and North-West may be economically carried on.

When the first Cleveland-built iron cargo steamer, the Onoko, was launched in 1882, she was aptly termed "the bull of the woods," pronounced as being too immense, large, unwieldy and altogether too stupendous and mammoth a craft to navigate the lakes, or be safely conducted through their rivers, and an impossibility, in so far as lake harbors were concerned. The general dimensions of the Onoko are 287.3 feet in length, 38.8 feet beam and 20.7 feet deep, tonnage 2,164 gross and 1,933 net. The last steamer launched, and the first of a fleet of the same size now building to the order of the same owners, is double the length of the Onoko within 77.6 feet and will nearly quadruple her carrying capacity, while, in point of construction, equipment and ability, is, without detracting one iota from the staunch built Onoko, as far ahead of the latter vessel as daylight is from darkness, which, in this instance, means a development period of eighteen years.

It is necessary for the RECORD to point out the wonderful and enormous strides taken within the past decade or two, in the methods of transporting waterborne traffic over thousands of miles, from East to West, and vice versa, so that due attention may be given, and interest aroused, to the necessity of preserving the means whereby this magnificent advancement has been made possible, viz.: the conservation, improvement and maintenance of lake surface levels. To further touch upon what has been, we may truthfully and advisedly state, that it is well within the business career of men actively engaged in commercial pursuits to-day, when the freight on iron ore from Marquette to Cleveland was $6 per ton, it has been carried at one-fifteenth of that cost since, and millions of tons from the more distant port of Duluth have been transported, in round figures, at one-twelfth of that figure to a port 200 miles east of Cleveland, involving another fair day's steaming to reach the port of destination and discharge. Furthermore, grain brought from the surrounding country to Chicago has been taxed within the foregoing space and period of time, 20 cents per bushel freight for delivery at Buffalo; millions of bushels have since been carried over the same route, better cared for and more expeditiously handled, for the sum of 1 cent per bushel, and this almost inconceivable economy has been brought about solely through the facilities offered to, and for, waterborne traffic, hence our argument in favor of maintaining lake levels so that further and still more wide-reaching commercial advantages may be made possible in this age, and with the advent of steamers 500 feet in length carrying at least (twenty cargoes in one, as reckoned three decades ago) 8,000 tons of cargo, safe and punctually and almost irrespective of weather conditions, for a period of two-thirds of each year.

With the development of the country bordering on and tributary to the chain of lakes, the desire to increase and accelerate waterborne traffic is occupying the talented attention of engineering scientists, energetically and eagerly backed and supported by the untold wealth of circumspect and commercially discreet capitalists. The possibilities of manufacturing industries and transportation projects are as immense as they have been unknown and untold until the present age or decade. The natural supply of the lakes is to be levied on for all conceivable purposes until artificial canals and aqueducts of lesser pretensions are projected to spread from the lakes like the tentacles of an octopus. The natural outlet from Lake Superior is being diverted; Georgian Bay, which may be considered an arm of Lake Huron, lying solely within Canadian territory, is to send a portion of its supply to Lake Ontario; Lake Michigan now supplies a miniature Niagara in waste water, through its recently opened drainage canal; the inlet at the mouth of St. Clair river is to be diverted by making a cut through Black river, also, for drainage and sanitary purposes, as at Chicago; the eastern end of Lake St. Clair is to feed a canal emptying itself into Lake Erie nearly opposite Cleveland; the Lime Kiln Crossing and the American channel is to be deepened and widened so as to permit of a greater outflow; a canal is in contemplation at Niagara through United States territory; and a Buffalonian recently advocated an aqueduct from Lake Erie to New York City so as to supply the metropolis, and incidentally all cities, towns and hamlets en route, with an unlimited amount of pure water for all purposes.

From the foregoing, we gladly hail the joint resolution which Senator Platt, New York, introduced in the Senate a few days ago and contained in another column of this issue of the RECORD. Nor can we believe, but that, if proper representations are made to the British Ambassador, he will be as eager to recommend his government to join in the formation of an International Commission to report on the best methods of maintaining the level of the lakes, as the Senate and House of Representatives will be in authorizing President McKinley to appoint an American Commission to act conjointly with that of our neighboring power.

It is but just to state that work on all of the foregoing projects is not as yet being actually carried on, at the same time we have not enumerated some of the minor schemes of interlake tapping. It further appears that the Dominion of Canada awaits, and is quite willing that this country should take the initiative in any measure having for its object the conservancy, maintenance and improvement of lake levels, rightly judging that, as the citizens of the United States have the most at stake, they should be the most zealous in attending to the majority interests.

We may further state that dredging the bottom surface, on which so many millions of dollars have been spent, is highly commendable, but there is an adage about "saving at the spile and wasting at the bung-hole" which applies with particular emphasis to the subject of lake level surfaces.

JANUARY is always the month when the lake marine fraternity get together and enjoy dances, socials, re-unions, etc. In this respect the month just closed has been no exception to those of previous years, and, in fact, if anything, re-unions have been more numerously attended and more enjoyable than ever before, each class trying to surpass their former occasions and make the social more enjoyable. The shipmasters, marine engineers and tugboatmen hold these annuals regularly, and vie with each other in offering their shipmates, associates, friends and patrons the greatest amount of possible enjoyment that can be squeezed out of a few hours leisure. This coming together once a year at each port makes for the best interests of the several branches of the sailing community, revives and cements old friendships and tends to make people more generally satisfied with their occupation and calling. Some of the balls given this winter have been quite pretentious affairs, notably those held at the principal lake ports. It can here be stated, and to the credit of lake-farers, that all of these socials are strictly select and exclusively participated in by the members and their individual friends or the personal friends of their friends. This is not always the case when socials are given by some of the shore communities.

THE Secretary of War has transmitted to the House his answer to the request for information as to the proposed canal project around St Mary's rapids. It includes the report of Lieut. Col. Lydecker, Corps of Engineers, U. S. A., made in September, 1898, which states that the American Lake Superior Power Co., by commencing the work of excavation in the navigable waters of the United States has violated the law, "knowing the same, informed and believe," and giving it as his opinion that the work should not be allowed to proceed. It concludes with Secretary Alger's permission, granted March 22, 1899, informing the power company that it can proceed with the work. We learn on what may be considered excellent authority that the President and Secretary of War is in favor of an international commission being appointed to take up the question of "tapping the lakes," but how the British ambassador and the Canadian government regards the matter, is not as yet positively known.

THE Merchant Marine Subsidy bill is running against snags and traveling over a foul bottom these times. The entire country says the measure should go through Congress, now, let legislators rectify the bill, or re-construct clauses, but, give us something.

RELATIVE to the increase of salary desired for the postal clerks doing duty on the Detroit river throughout the season of navigation, there is no good reason why extra hazardous service should not meet with a more liberal compensation than is paid for ordinary, though constant aud regular routine duty on shore. The postmaster at Detroit recognizes the enhanced services of the marine postal clerks and such representations have been made to the Postmaster-General at Washington, that he is also convinced that men sailing on the river day and night, are justly entitled to a little more recompense than their colleagues ashore receive. Vessel owners and masters, charterers, shippers, and consignees as well as underwriters and other closely allied interests are greatly benefitted by the Detroit river postal service, it is therefore quite in order for those who in a measure depend on the river postal service, to show their appreciation by making a strong pull for the more satisfactory perfomance of the work through an advocacy of a little better pay for those engaged in boarding passing vessels. The several established societies, such for instance as the Shipmasters' Association, the Marine Engineers' Benevolent Association, the Harbors of Masters and Pilots, Seamen's Union, Longshoremen's Union, etc., should make separate and joint efforts to render the Marine Postal Service at Detroit a fairly paying one for those detailed to that duty. From an individual standpoint the greatest good is worked to the greatest number in the receipt and delivery of mail matter by and to the members of the crews of vessels passing Detroit and they all know how much more arduous is the postal river work than city or shore work. The RECORD would like to see strong resolutions drawn up by the above mentioned societies and forwarded to where they would do the most good in securing a prompt advance in the pay of the Detroit river mail clerks.

THE effects of the Chicago drainage canal are beginning to be felt already. It is now learned, that the chief engineer of the canal, has notified the sanitary district trustees, that to preserve navigation the Chicago river will have to be dredged from Twenty-sixth street to Fortieth street before spring. The opening of the drainage canal has lowered the water from a depth of 17 feet to 14 feet. The south branch is lined with grain elevators and lumber yards, and it is apprehended that the owners of docks will claim heavy damages. The engineer figures that it will be necessary to excavate a channel fifty feet wide. Another feature which does not seem to have been figured on, is the influx of ice from the lake, heavy chunks of green ice sweeping up the river is causing some uneasiness to the owners of vessel and dock property. The worst feature of the Chicago drainage canal lies in the fact that its effect on the lake Michigan levels, can not be ascertained, on account of the lack of previous data. The waters of Lake Michigan are exclusively within National bounds, so that we can do what we like with it. The fact should also be remembered, that Georgian Bay lies within the territory of the Dominion of Canada and that a canal to Lake Ontario is on the tapis. By the way, the same argument applies to building naval tonnage if we persist in exacting territorial rights as mentioned in the RECORD last week.

AT any and every lake port piers are built straight out from the river bank lakewards, breakwaters, if any, are usually built paralled to the ends of the piers. This rule or custom applies in equal sameness on the north, east, south, or west shores, irrespective of local conditions, such as existing under or surface currents, prevalence of winds, etc. There is now dawning a change over the former order of plans and construction work, and the district officers of the Corps of Engineers, U. S. A., are taking some originality upon themselves in making recommendations for the upkeep of the old and the plans of construction for the new projects authorized by Congress. One of the greatest improvements is in building concrete superstructures instead of the former fast decaying material of wood and its temporary iron fastenings.

THE matter of a river and harbor bill for this session of Congress has been in abeyance for some time, but owing to reports received from the Chief of Engineers, U. S. A., as to the amounts on hand for work now in progress, the committee decided to postpone action on the bill until the next session of Congress. Meantime all the hearings will be held and the bill prepared prior to the reassembling of Congress, so that action on a bill may be secured soon after Congress meets next December.

CONVENTION OF MARINE ENGINEERS ENDORSE THE SHIPPING BILL.

The following preamble and resolution has been filed this week with the chairman of the Senate Committee on Commerce and the House Committee on Merchant Marine and Fisheries.

At the 25th annual convention of the National Marine Engineers' Beneficial Association, the following preamble and resolution were presented and unanimously adopted :

Whereas, the interest of the whole country, the re-inforcement of our Navy, the increased employment of our mechanics and marine engineers, and the training of men to man our ships, would all be promoted by the restoration of our merchant marine to its former grand position on the seas of the world,

Therefore, be it Resolved, By the National Marine Engineers Beneficial Association, in convention assembled, that in our opinion it is the duty of Congress at the earliest possible day to extend such aid by subsidy to American built mail carriers and freighters as will enable them to successfully compete with the subsidized merchant ships of foreign countries in the carrying of our imports and exports provided, that such ships shall be fully officered by citizens of the United States and in addition thereto at least 35 per cent. of the balance of the crews shall be citizens of the United States. (Signed) GEORGE UHLER.
National President.

Attest: GEORGE A. GRUBB, National Secretary.

BUILDING AT THE CRAIG SHIPYARD.

The Craig Ship Building Co., Toledo, O., have a neat half-million dollars worth of work on hand in new construction.

As the builders designation goes, No. 77 is a schooner-rigged steamer of 2,200 gross tons. Her dimensions are 260 feet over all, 242 feet keel, 42 feet beam and 25 feet molded depth, building to the order of Arthur Hawgood and others, Cleveland. She will be fitted with triple-expansion engines, erected by the Detroit Ship Building Co., diameter of cylinders 19, 30 and 52 by 40 inch stroke. Boilers, are two of the Scotch type, 10½ feet in diameter by 11½ feet in length, furnished by the River Machine Co., (Teare & Thomas) Cleveland. The estimated cost of No. 77 is $185,000.

No. 78 is a propeller of 1,400 tons, building to the order of B. J. Arnold and others. Her dimensions are 200 feet over all, 185 feet keel, 32 feet beam and 19 feet molded depth. The engines, supplied by the Craig Ship Building Co., are 20, 32, and 54 by 30-inches stroke. Boilers, are 4 of the Roberts' safety water-tube type, and the estimated cost of the craft is $125,000.

No. 79 is a schooner-rigged steamer of 2,000 gross tons, building to the order of J. L. Crosthwaite. Her dimensions are 260 feet over all, 240 feet keel, 40 feet beam and 18½ feet molded depth. Her engines, also built by the Craig Ship Building Co., are 20, 33 and 54 by 40 inches stroke. Boilers, are two of the Scotch type, 12½ feet diameter by 11½ feet in length, her estimated cost is $185,000.

THE HOLLOW STAYBOLTS.

There seems to be some misunderstanding about the Falls Hollow Staybolt, as they often receive inquiries as to whether it is hollow clear through, or only in beyond the thickness of the sheet.

These bolts are made from rods about 8 feet long which are rolled hollow their entire length and cut off as required, the hole being central in all cases. The diameter of the hole can be varied as desired by the customer from ⅛ inch to ¾ inch, according to size of the bolt. The average hole is 3–16 inch.

The relative merits of hollow rolled or drilled bolts are viewed differently by different people, the question of cost being the main point in most cases. The Falls Hollow Staybolt Company state that they are now able to offer hollow bolts of best charcoal iron at a price which makes it unprofitable to drill them. They also furnish steel staybolts when desired for marine or other service.

THE BETHLEHEM STEEL CO.'s calendar for 1900 is not only a serviceable reminder of dates, but is likewise a reminder to all interested in forgings of steel or nickel that this company leads the industry in that line in America, while a table on the card shows the weight of round steel per running inch of all the principal diameters, and on the sheet for each month is an illustration of some part of the process of work at the company's establishment in South Bethlehem, Pa.

AN INTERNATIONAL COMMISSION TO MAINTAIN LAKE LEVELS.

Mr. Platt, of New York, introduced the following joint resolution in the first session of the 56th Congress, which was read twice and referred to the Committee on Foreign Relations:

Joint Resolution—Authorizing the President of the United States to invite the government of Great Britain to join in the formation of an international commission to examine and report upon the diversion of the waters that are the boundaries of the two countries.

Resolved, by the Senate and House of Representatives of the United States of America in Congress assembled, that the President of the United States be, and he is hereby authorized to invite the government of Great Britain to join in the formation of an international commission, to be composed of four members from each country, whose duty it shall be from time to time to report upon the conditions and uses of the waters adjacent to the boundary line between the United States and Canada, including all the waters of the lakes and rivers whose waters flow by the river St. Lawrence to the Atlantic ocean, and also upon the effect upon the shores of these waters and the structures thereon and upon the interests of navigation by reason of their diversion from their natural flow, and further to report upon the necessary measures to regulate such diversions.

The President is authorized to appoint the United States members of such commission, and said commission is authorized to employ such surveyors, experts, and other persons as it may deem needful in the performance of the duties hereby imposed.

The sum of twenty thousand dollars is hereby appropriated to pay the portion of the expenses of said commission chargeable to the United States, including the compensation of the commissioners representing the United States and of surveyors, experts and other necessary services.

CHICAGO-CANADIAN TRAFFIC.

There were last year 221,972,133 bushels of grain and 5,421,548 barrels of flour shipped from Chicago eastward, mostly for export. Out of this total Canadian routes secured hardly a twelfth of the business. Not more than 12,740,724 bushels of corn went through Canadian territory.

Statistics of this business from Chicago going by way of Canadian ports are as follows:

To Kingston—199,650 bushels of wheat, 1,886,461 bushels of corn, 319,800 oats, 25,000 rye.

To Depot Harbor—7,943 barrels of flour, 791,055 bushels wheat, 6,278,728 corn, 1,057,875 oats, 284,440 barley.

To Prescott—24,000 bushels wheat, 910,104 corn.

To Midland—457,000 bushels wheat, 2,482,249 corn, 105,000 oats.

To Sarnia—78,543 bushels corn, 2,893,096 oats.

To Owen Sound—150,000 bushels wheat, 333,447 corn.

To Goderich—732,530 bushels corn, 92,600 oats.

To Collingwood—38,162 bushels corn.

The Grand Trunk railway captured from the Chicago business 11,975,787 bushels of grain.

NOTES.

THE Calvin Co., Ltd., Garden Island, Ont., are building a schooner-rigged tow barge on their own account. Her dimensions are 200 feet in length, 40 feet beam and 16 feet deep.

ACCORDING to the ice bulletin issued weekly by the Weather Bureau, climate and crop division, a number of lake stations at which there was no ice on January 22d, report from 1 to 5 inches on the 29th. The ice is now from 1 to 15 inches on the upper lakes and 2 to 6 inches on the lower lakes. Notwithstanding the quite rapid formation of ice during the week ending the 29th, there was from 2 to 11 inches less ice in the lake region than at the corresponding date last year.

THE Polson Iron Works, Toronto, Ont., have considerable marine work on hand, including the rebuild of the composite steamer Sir L. H. Tilley, which J. & J. T. Mathews purchased from the insurance companies last fall. Among the new work are several composite steam yachts. A 53 footer is fitted with triple expansion engines, Yarrow tube boiler, independent air pump and condenser for Rev. Elmore Harris, Toronto. Also yachts of 56 feet, 36 feet and 34 feet in length. The 36 footer is fitted with fore and aft compound engines and vertical, submerged tube boiler, built for George Gooderham, Toronto. In addition to the foregoing there are several marine machinery outfits on hand, two of which go to Victoria, B. C., and New Westminster, B. C.

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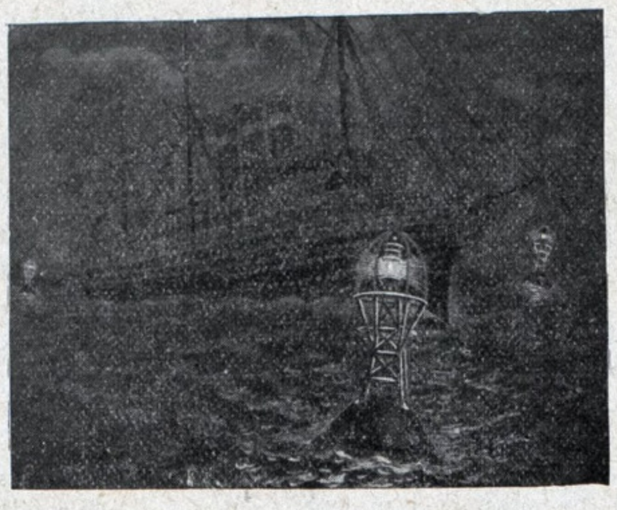

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POPULAR NOTES ON THE HEAVENS IN FEBRUARY.

(Communicated.)

The evening sky for February is the most brilliant of all the year, for at that time the most conspicuous winter constellations are passing the meridian, and hence are at the height of their beauty.

Orion, Canis Major and Minor, Taurus, the Gemini and Auriga, with their array of first magnitude stars are included in the brilliant display referred to above.

Unfortunately, clouds frequently obscure their beauty, and when the sky is clear the temperature is generally too low to be conducive to the study of the stars, though they have a sparkle at such times not found when the mercury is higher in the tube.

Toward the east, Leo may now once more be found. His distinguishing characteristics are the well-known Sickle with the first magnitude Regulus, and a right-angled triangle whose brightest star is Denebola. Leo appears to better advantage later in the season, when some of the more brilliant constellations have passed from view. Vega in Lyra may still be seen in the early evening toward the north-west, but Altair in Aquila is too near the western horizon to be easily seen.

Deneb, the brightest star in Cygnus may still be found toward the west early in the evening. The standard of the large cross that forms the outline of the constellations is now almost perpendicular to the horizon. Little 61 Cygni, our sun's nearest neighbor among the stars, visible in this latitude, is now favorably situated for observing, either with a telescope or by unaided vision. It is a little below the fifth magnitude and may be found at the upper left-hand section of the cross. Seen through a telescope it is a beautiful little double star, whose components are of about equal magnitude, and their combined mass is less than that of our sun.

Our sun's nearest neighbor among the stars is Alpha Centauri, a first-magnitude star of the Ceutaur, in the southern hemisphere. This is also a binary of almost equal components, but much larger than those of 61 Cygni.

The distance of this nearest star is so vast that when expressed in miles, it conveys no meaning. So astronomers have adopted the light year as a unit of measure. As the term implies, the light year is the distance that light travels in one year. The velocity of light according to the latest determination is 186,330 miles per second. It requires 8 minutes and 19 seconds for light to reach us from the sun, in one year, therefore, light will travel 63,200 times the distance of the earth from the sun.

From Alpha Centauri, light requires four years to make the journey, hence the distance that separates us from our nearest neighbor among the stars is 252,800 times our distance from the sun. Twice that distance or 8 light years separates us from 61 Cygni.

Sirius, the brightest star in all the heavens, is thought to be our next nearest neighbor, within a distance of 8.3 light years.

Procyon of Canis Minor is placed at the distance of 12.3 light years. Vega in Lyra at 20 light years. Aldebaran in Taurus at 27, Capella in Auriga at 29, Regulus in Leo at 32, and Polaris, the North Star, at 47 light years.

Dr. Young, of Princeton, says: "That the naked eye stars are probably for the most part within 200 or 300 light years, and that many of the remote stars must be thousands, or even ten thousands of light years away."

Mercury passes superior conjunction behind the sun February 2nd, and will become evening star, but his angular distance from the sun will be so small that he will not be visible during this month. Venus will continue to increase in brilliancy and beauty as she still increases her angular distance from the sun and diminishes her distance from the earth. She is now the brightest star in the evening sky. When seen through a telescope she presents all the phases of the moon except when she, the moon, is at the full.

Mars is slowly emerging from behind the sun, and is classed as morning star, but he is still lost in the rays of the sun. Jupiter is in Scorpio almost ten degrees directly north of Antares in Scorpio. He is favorably situated for observing through the telescope, but for the unseasonable hour, from four to five in the morning, and the general low temperature.

Saturn is in Sagittarius and may easily be recognized toward the southeast just before dawn, as the brightest star in that part of the heavens.

Certainly every one rejoices in the increasing daylight in the evening. At the beginning of February the gain was 46 minutes in the evening, and that will be increased to one hour and 18 minutes at its close. The daylight in the morning now comes fifteen minutes earlier than it did and this will be increased to forty minutes at the close of the month.

January 29th, a spot brought into view by rotation was observed advanced about one day's journey on the sun's disk. Its greatest dimension is about 25,000 miles. The spots last observed previous to this one disappeared December 7th, the longest period of freedom from spots that the sun's disk has ever known in the experience of the writer.

Toledo, O. D. SATTERTHWAITE.

OBITUARY.

(CAPT. WILLIAM REED.)

Captain William Reed, one of the best known mariners on the chain of lakes, died last week at the residence of his son, Thomas, in Toledo, with whom he has made his home for several years past. Capt. Reed was born in Port Dalhousie, Ont., August 29, 1835. He began sailing at the age of 14, with Capt. Alexander Muir. He afterward sailed the schooner James Colmar, when he was but 20 years old. For seven years he was in the employ of the Wabash line. He owned the schooner Sea Gull and sailed her, and the Hattie Wells and other schooners. Capt. Reed settled in Toledo in 1871, and has resided there since that time. He was a man of sterling integrity, and he held the respect of all who knew him. Some time ago, while on the Cherry street bridge, Capt. Reed was stricken with paralysis, which led to his death. He leaves a son, Mr. Thomas W. Reed, purchasing agent for the Wabash Lake line, and sister, Mrs. Charles Thorpe. He has three brothers, Richard and Captains John and Thomas Reed. John and Thomas attended the funeral, the former from Port Dalhousie, Ont., and the latter from St. Catharines, Ont.

(C. R. JONES.)

Mr. Charles R. Jones, vessel broker and marine insurance agent, died at Lakeside hospital on Monday morning of pneumonia, after a few days sickness. Mr. Jones had suffered from a cold for a week or more, but up to Thursday he was able to attend to his business and was at his office for the last time on that day.

Mr. Jones was a son of the late Capt. J. M. Jones, who died at Detroit a few years ago, and who was one of the pioneer shipbuilders on the lakes. Capt. Jones built a number of vessels in the '60 s at Cleveland and Lorain and was very well known by the old line vesselmen.

The late Mr. C. R. Jones was born in Detroit about thirty-three years ago. He was in the United States navy for a number of years, and although a very young man he had traveled considerably. He settled in Cleveland several years ago and started in the vessel brokerage business, in which he was very successful.

Mr. Jones managed the steamer Aragon, which is being operated on the Atlantic coast, and the steamers Argo, A. G. Lindsay, Rhoda Emily, W. L. Wetmore and M. C. Neff, and the schooners Charles Wall and Brunette, and he had an interest in most of the vessels named. Mr. Jones was a big hearted fellow and he made friends wherever he went.

The funeral took place from the residence of his sister, Mrs. D. J. Kaplin, No. 84 Edgewood place, on Wednesday afternoon, and was numerously attended by marine men.

NOTICE TO MARINERS.

DOMINION OF CANADA—ONTARIO.

IMPROVEMENT IN PINE TREE HARBOUR RANGE LIGHTS.—The private range lights established in 1895, at Pine Tree Harbor, on the Lake Huron shore of the County of Bruce, Ontario, have been improved by the substitution of enclosed towers for the masts previously used.

The towers are square wooden buildings and are painted white with red tops. The front range building is 28 feet, the back one 34 feet, high from base to vane. The lights are fixed white, catoptric, the outer one elevated 26 feet, the back one 32 feet, above the level of the lake. They should be visible 10 miles in the line of range.

The front tower is built on a rock on the Northeast side of the harbor, opposite the saw mill; the back one stands on shore 350 feet N. E. ½ N. from the front one.

Masters approaching the harbor are warned that the lights in one, bearing N. E. ½ N., lead over a shoal with 14 feet water upon it, and that local knowledge is needed to enter with more water. There is a depth of 12 feet at the wharf. but the harbor is so small that a vessel drawing 9 feet has difficulty in turning.

F. GOURDEAU,
Deputy Minister of Marine and Fisheries.

Department of Marine and Fisheries,
Ottawa, Canada, 16th January, 1900.

☞ All bearings, unless otherwise noted, are magnetic and are given from seaward, miles are nautical miles, heights are above high water, and all depths are at mean low water.

Pilots, masters or others interested are earnestly requested to send information of dangers, changes in aids to navigation, notices of new shoals or channels, errors in publications, or any other facts affecting the navigation of Canadian waters to the Chief Engineer, Department of Marine and Fisheries, Ottawa, Canada.

Commander C. C. Todd, U. S. N., Hydrographer, Bureau of Equipment, Washington, D. C., has sent out the following Notice. St. Marys River—Hay Lake—Amendment to U. S. Engineers' chart.—Referring to U. S. Engineer's chart No. 84, St. Marys river No. 2, edition of 1898, the course plotted thereon between Frechette Point and Middle Hay Lake ranges should read N. W. ¾ N. instead of N. W. ¾ W.

"NEGROES are sometimes very original in their dealings with white men," said the foreman of a North Memphis iron foundry. "A couple of negroes were unloading pig iron for me the other day, and as it comes in pretty good-sized chunks one chunk is a heavy load. One of the negroes came to a chunk which was twice the usual size, being two chunks that had run together. He stopped work the minute he caught sight of it. 'What are you stopping for?' I yelled. 'Pick it up!' 'Boss, I doan mine onloadin' pig iron,' said he, 'but when it comes to hog iron, I quits.' "

ASBESTOS SHEET FIRE-FELT.

(PATENTED)

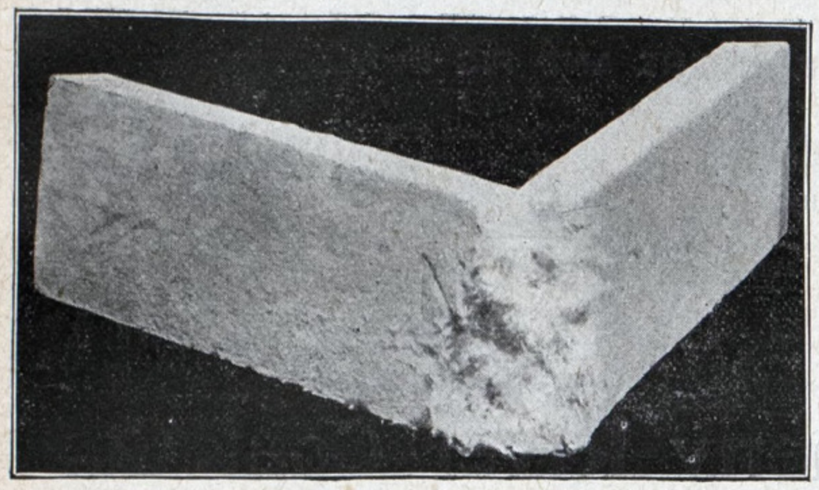
Sheet Fire-Felt is a firm, even block of Fibrous Asbestos, and is the same material as the best Fire-Felt Pipe Covering. It is very light in weight, is singularly adapted to all conditions of heat insulation, and will remain intact and effective when some other materials crack and disintegrate. It does not sag, settle or powder.

For large pipes, boilers, drums and other large surfaces, Fire-Felt is furnished in sheets, flat or curved, which can be removed and replaced without injury. It is especially valuable for marine and other high-pressure surfaces.

Asbestos Cemented Felting adheres very readily to Sheet Fire-Felt, and can be used over sheets with excellent results in place of canvas if so desired.

ASBESTOS FIRE-FELT SECTIONAL COVERING (PATENTED.) FOR STEAM PIPES, ETC.

Asbestos, in its fibrous or finely divided state, contains innumerable minute air cells, holding in suspense confined air, thus making a non-conductor of heat of the highest order.



Asbestos Fire-Felt is a fabric composed of the above, and is made in cylindrical sections for pipes, sheets for boilers and rolls for heaters and heater pipes.

In Fire-Felt the H. W. Johns Mfg. Co., New York, have the most successful application of the air space principle yet devised, and a material at once fire-proof, elastic, light in weight, pleasing in color and susceptible of any desired mechanical arrangement.

Fire- elt is not affected by expansion or contraction of pipes or moisture, and will not disintegrate.

Asbestos Fire-Felt sections are made in sizes to fit standard makes of wrought iron pipe from ½ inch to 16 inch inclusive, and are carried in stock.

Sections in excess of 4 inches diameter are made in two pieces with interior corrugations. These corrugations give the covering great elasticity and insure close contact with the pipes and add to the ease of application. Each section is 3 feet in length.

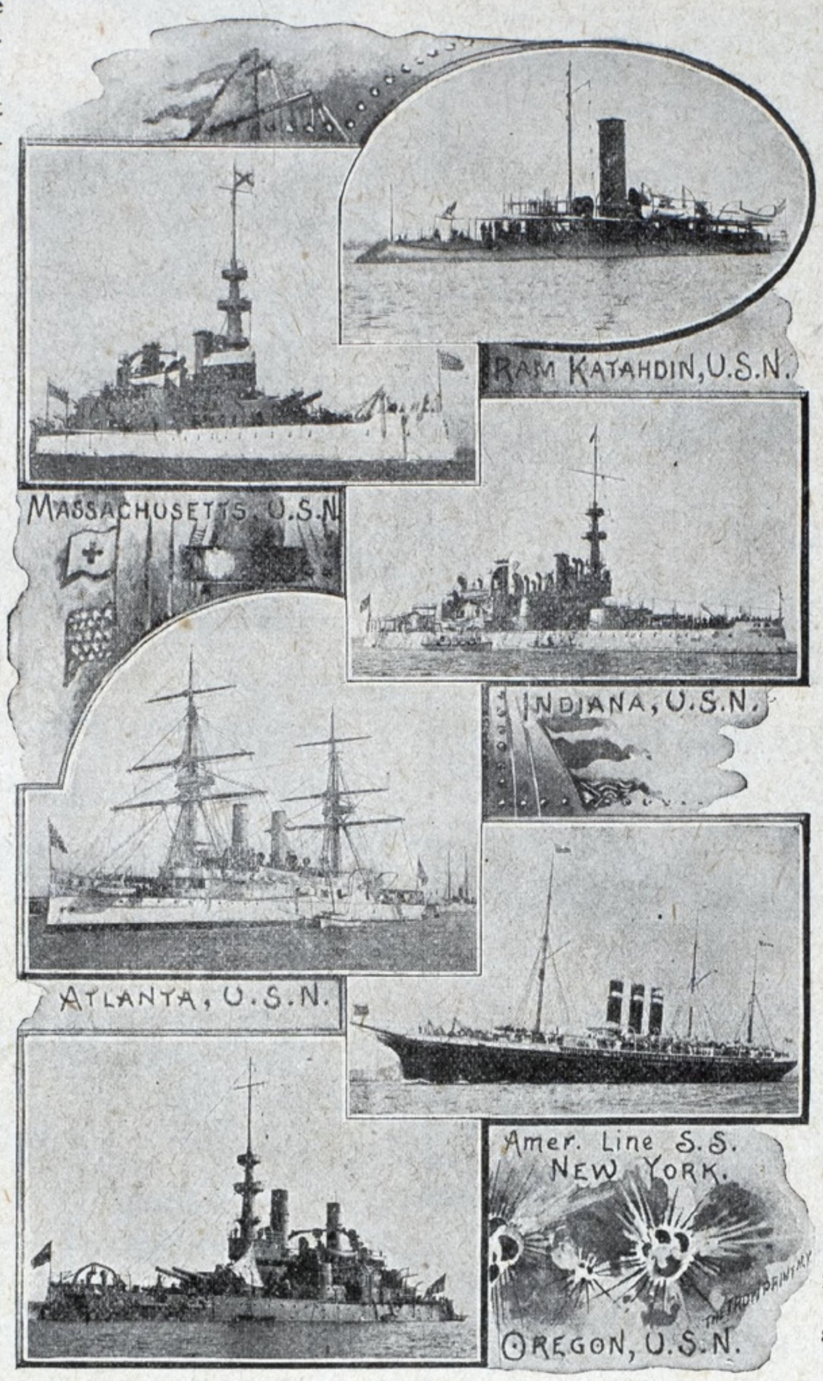
Fire-Felt sections for steam pipes approximate 1 inch in thickness (greater thickness to order) and are covered with strong canvas. Bands for holding covering to pipes accompany each shipment.

SHIPPING AND MARINE JUDICIAL DECISIONS.

(COLLABORATED SPECIALLY FOR THE MARINE RECORD).

Action by Managing Owners.—An action by the "managing owners" of a vessel described in a charter party, for a breach of the charter party, cannot be defeated by showing that the vessel referred to in the charter was only owned in part by plaintiffs. Torras vs. Raeburn, 33 S. E. Rep. (Ga.) 989.

H. W. JOHNS M'F'G CO.



THIS FLEET FITTED WITH THE H. W. JOHNS MFG. CO.'S PRODUCT.

Action for Negligence.—A declaration alleging that plaintiff was employed by men unloading defendant's vessel to supply them with drinking water, and was injured in jumping from said vessel to the dock, which he was "moved and impelled to do by the said exigency, believing at the time that he might safely do so," states no cause of action, when the only allegation showing "said exigency" is that defendant wrongfully and negligently removed the gang plank after the unloading ceased, and started to move the vessel before the plaintiff had time to safely land. Judgment (1898) 79 Ill. App. 19 affirmed. Atkins vs. Lackawanna Transp. Co., 54 N. E. Rep. (Ill.) 1004.

Drinking Water.—A transportation company is required to exercise only reasonable care, and not the highest degree of care, for the safety of one employed by its men, engaged in unloading its vessels, to supply them with drinking water. Judgment (1898) 79 Ill. App. 19, affirmed. Atkins vs. Lackawanna Transp. Co. 54 N. E. Rep. (Ill.) 1004.

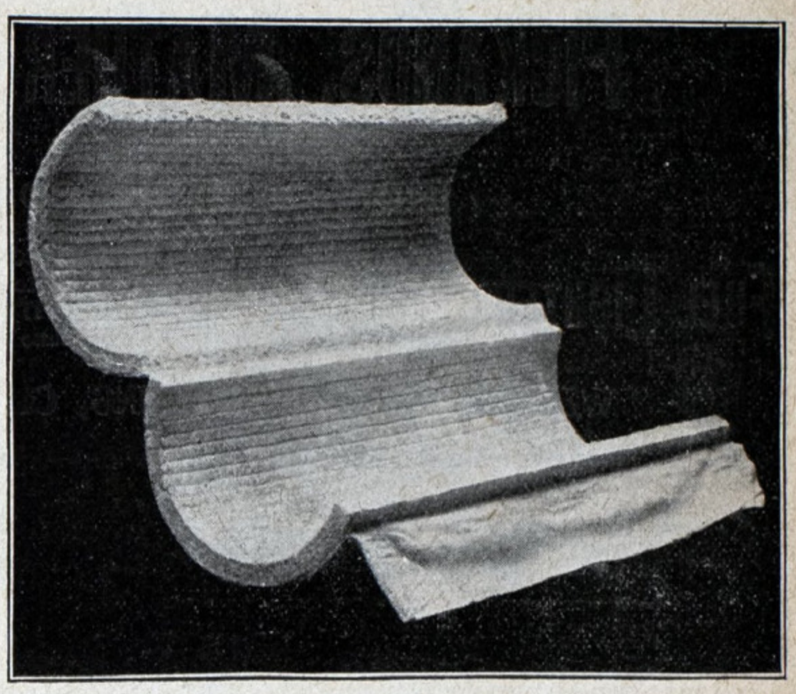
MARINE PATENTS.

Patents on marine inventions issued January 23, 1900. Reported specially for THE MARINE RECORD. Complete copies of patents furnished at the rate of ten cents each.

641,668. Endless-chain Propeller. Reinhold Begas, Berlin, Germany.

641,695. Submerged Current Motor. R. E. Hardaway, Austin, Tex.

642,291. Hatch-fastener. B. F. Bowman, Cleveland, O.



641,714. Boat Detaching Apparatus. August May, Hamburg, Germany.

641,716. Apparatus for Hydraulic Dredging. B. J. Methvin, Tacoma, Wash.

641,838. Sheet Piling. G. H. Cavanagh, Boston, Mass.

641,198. Insulating panel for walls of ships, G. P. Erhard, Elizabeth, N. J., assignor to The H. W. Jones Manufacturing Company, New York, N. Y.

641,233. Wave moter, C. F. A. Roell, Los Angeles, Cal., assignor of one half interest to J. C. Orth, same place.

641,289. Paddle-wheel. Reinhold Heere, Berlin, Germany.

641,321. Sailing vessel. G. H. Perkins, Philadelphia, Pa.

641,396. Instrument for recording course and speed of vessels. Albert de Laski, New York, N. Y, assignor of one-third to E. N. Dickerson, same place.

641,487. Indicator for ships' compasses. H. P. Arbecam, Boston, Mass., assignor to the Arbecam Indicator Company, same place.

641,504. Buoyant boat-cover. G. K. Gandy, London, England.

641,505. Air-lock for caissons, etc. R. S. Gillespie, New York, N. Y.

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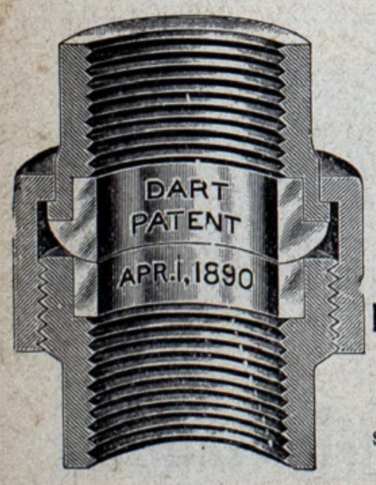

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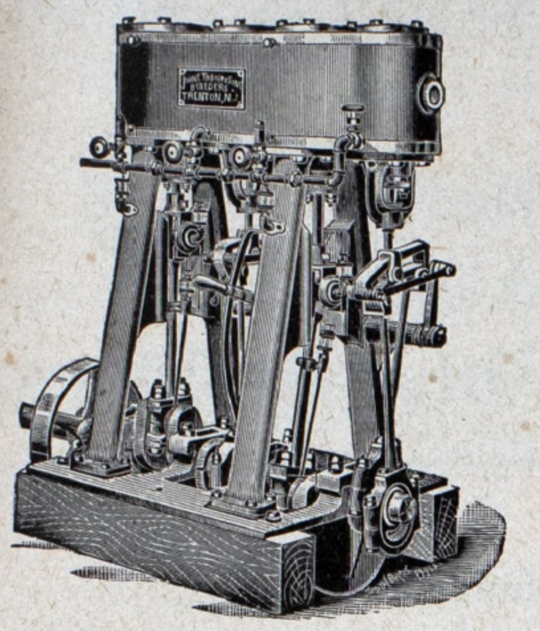

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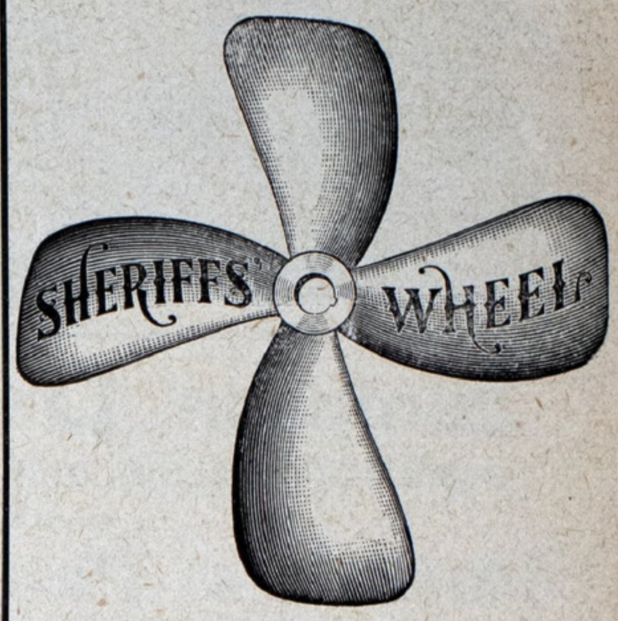

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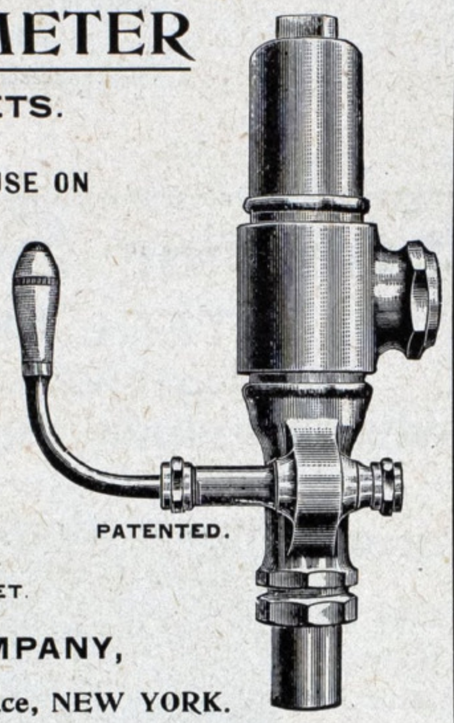

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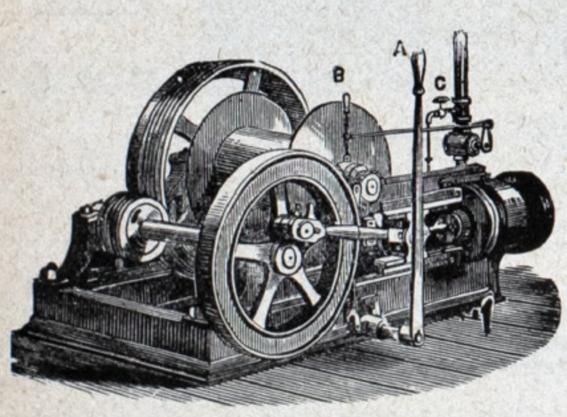

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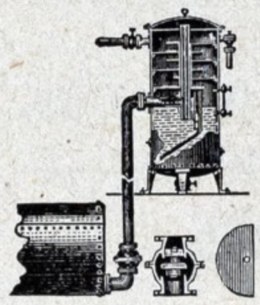

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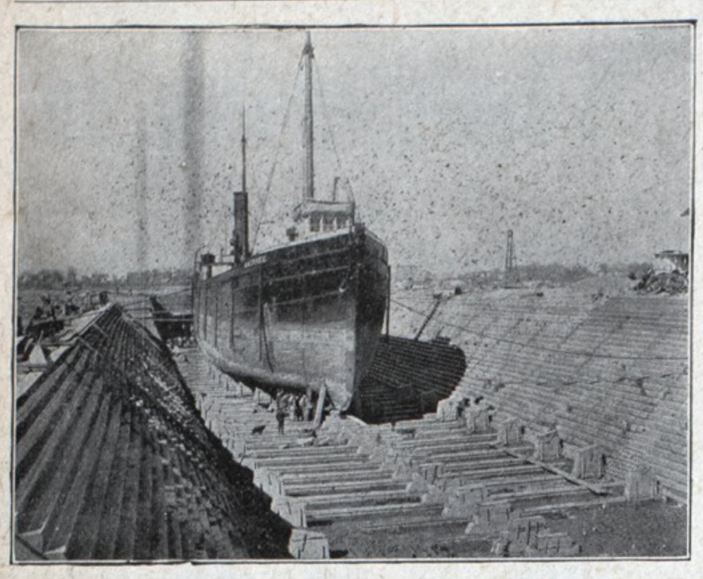

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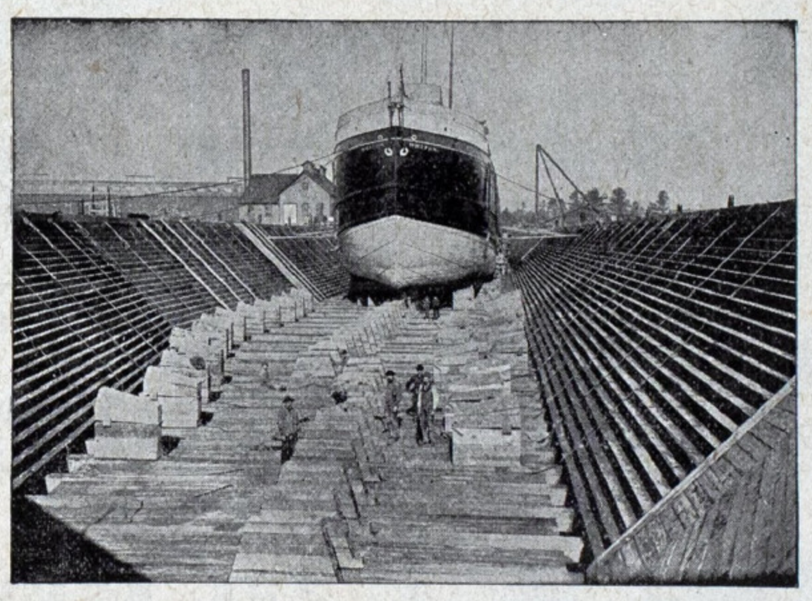

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